## Georgios K. Giannakis

The general character of the language of the kingdom of ancient Macedonia and its relation to Greek has since antiquity been the subject of debate, oftentimes colored by tension, sometimes conducted not necessarily on strictly scientific grounds, but generally scholarly criteria have prevailed. The debate revolves around two main theses: one school of thought holds that Macedonian is an independent Indo-European language (e.g., O. Müller, G. Meyer, M. Vasmer, and others); the second school of thought believes that Macedonian is part of the dialect geography of Ancient Greek (e.g., G. N. Hatzidakis, O. Hoffmann, and others). An offshoot of the second position is represented by a number of scholars who have been working on the topic during the last two or three decades and hold that Ancient Macedonian belongs to the North-Western dialect group, with close affinities to the Doric group. The main difficulty in tackling the problem of identification of Macedonian is the fragmentary material, which consists of ca. 150 glosses, approximately 200 proper names (anthroponyms and place names), a corpus of epigraphical material written in Attic koine but with certain survivals and/or influence from the spoken language of Macedonian, and a number of references in ancient authors. However, the achievements of historical linguistics and dialectology of Ancient Greek during the last three decades have much contributed to the clarification of the issue of the language of the ancient Macedonians. To the same end of crucial importance are also the finds of archaeological excavations in the area, the study of which has added an interdisciplinary touch to the whole matter, a fact that affects the interpretation of the linguistic material as well.

The studies in the present volume represent the accumulated knowledge of four scholars who specialize in the study of the language and culture of ancient Greece, of Macedonia in particular. As required by the nature of the topic, their approach is interdisciplinary. The first study focuses on the history of ancient Macedonia up to the Hellenistic period, the second study examines the archaeological finds, the third study tackles the issue of the philological data and the linguistic map of Macedonia, whereas the last chapter focuses on the
examination of the language issue. The common feature that functions as the unifying thread for all four essays is the objective study of the relevant issues by four authorities in the study of the language, the history and the archaeology of ancient Macedonia. The main focus of the volume is the relation of Macedonian to Ancient Greek, more specifically its position within the dialect geography of ancient Greece, an effort supported by evidence from the contiguous disciplines of philology, history, and archaeology.

Professor Zahrnt's essay gives an outline of historical facts whereby Macedonia became a leading power, mainly during the reign of Perdiccas, Philip, and Alexander. In this study one finds a historical outline of the beginnings of the kingdom of Macedonia based on the oldest references by ancient historians, mainly Herodotus and Thucydides. The two historians were not that distant from the facts they are relating, and their voyages armed them with a familiarity with the conditions and the facts themselves in the region. Furthermore, in their works they make an excursus on the older history of Macedonia: in Herodotus (8.137ff.) on the founding of the Macedonian kingdom, and in Thucydides (2.99) about its evolution up to the Persian Wars. The two historians examine the early history of Macedonia in the framework of referring to events of the history of Greece in general, for, as they believed, the events in the two areas were related to one another. Zahrnt talks of the expansion of the Macedonian kingdom as well as its relations to both the neighboring nations and to the Athenians, especially during the Peloponnesian War. The essay closes by mentioning Philip's effort to unite the Greeks in their common effort to lunch an excursion against the Persians, as decided in the Congress at Corinth ( 337 BC ), and finally the passing of the leadership to his son Alexander, who was to fulfill his father's plan to punish the Persians, the old enemy of the Hellenes. In sum, the essay provides the general historical background within which Macedonia came into history, was organized and evolved into a great world power of antiquity; it also provides the framework within which one should read the rest of the essays of the book.

Arthur Muller discusses the archaeological evidence, which points to a picture similar to that from other regions of Greece, as far as the city planning, the temples and sanctuaries, and the beliefs of the Macedonians towards their dead and the like are concerned. In Macedonia the institution of kingship survived till quite recently, a fact that offers the researcher the opportunity to document with specific evidence the structure of the kingdom of Macedonia, and at the same time to be able to make more plausible hypotheses with regard to this institution in prehistoric Greece. As noted by Arthur Muller, "from this necessarily incomplete overview we derive at the same time the sense of familiarity, of difference, and of the originality of Macedonian monuments". By the term familiarity we refer to the fact that all relevant features are Greek, namely "the forms and their expression, -from city planning and residences, sanctuaries and tombs to material production in general- [in] the customs, way of life and beliefs that could be connected with these monuments, and [in] religious practices and burial customs". As for the feature of difference, he refers to the fact that in Macedonia one also meets certain features which are completely absent from Greece of the city-states, e.g., the palaces, memorial graves, and the court art, all of which are associated with the institution of kingship, something that in the rest of Greece was given up from an early period. Yet, "this difference is always translated into a language with exclusively Greek types, indeed a language characterized by an amazing coherence, since the architecture of the facades on the palaces and Macedonian tombs is essentially identical, as is the wall decoration of palaces, aristocratic residences, and monumental tombs". Finally, with respect to the feature of originality, the author claims that 4th-century Macedonia had not simply borrowed from the other Greek city-states forms and models but in most cases its contribution to their further evolution was crucial.

Recent studies show that Macedonia had many inventions that in the past were associated with other centers of antiquity, such as the construction of large residential communities on top of elevated areas, large colonnades in public buildings, composite architectural style, the structural style in house decorations, and the pictorial style in the mosaics. In certain instances, like painting, Macedonia is the only place that preserves such a style. Muller concludes his study by stating that future research will reaffirm the special position of Macedonia in the study of civilization of ancient Greece.

The findings of Arthur Muller prove to be of special significance for the interpretation of the linguistic material, which is attempted in the next two essays of the volume. This fact supports the view that, as in the case of the archaeological material, the Macedonian language too is closely related to Ancient Greek as one of its dialects.

The next two chapters tackle the issue of the language of Macedonia. More specifically, within a philological framework, Professor Emilio Crespo discusses the linguistic state of ancient Macedonia, concluding that Macedonian is a dialect of Greek
with special connections to the North-Western Greek dialects, a conclusion that finds further support in the last essay by Julián Méndez Dosuna. Emilio Crespo offers a general evaluation of the languages and dialects which, directly or indirectly, are attested in ancient Macedonia in written documents of the 5th4 th centuries BC.

According to the author, the linguistic picture that emerges from the examination of these documents discovered in the geographically multivaried but politically unified region of Macedonia points to a linguistic mosaic consisting of local Greek dialects and at least one more Indo-European language. With regard to this Indo-European language Crespo talks of a "linguistic adstrate", which is attested only in some glosses in Greek texts of the area, as well as to two or three phonological features that rather point to Phrygian and Thracian. Furthermore, it is possible that other languages were also used, such as Illyrian, which have not been preserved in texts or in references by ancient authors. Finally, some foreign anthroponyms mentioned in texts of Greek writers, point to speakers of Phrygian, Thracian, and Illyrian. Professor Crespo is of the opinion that the unknown Indo-European language was still in oral use at the time of the first written texts in the 5th century, and we may assume that it was preserved insofar as its traces in the pronunciation of Greek are visible in Greek texts. On the other hand, the local Greek dialects used in the city-states that were accessed by the kingdom of Macedonia were gradually replaced in the written language by Attic-Ionic koine, perhaps even at an earlier time than in other Greek territories as a means to cope with the communicative needs during the mid-4th century. The local Macedonian dialect, which was most likely never used as the language of state documents, ceased to be used for writing private documents as well, as it was superseded in all functions by Attic-Ionic koine.

The disappearance rate of the local dialects was accelerated during the Roman conquest of Macedonia in 168 BC , while the role of Attic-Ionic koine was further strengthened. It is during this period that the oral use of the local dialects and of the unknown Indo-European language faded. As a result, these local languages disappeared completely, whereas the last reference to the Macedonian dialect in the oral speech comes from the early part of the Christian era when Strabo (7.7.8) reports that some ( ${ }^{\prime} v 101$ ) Macedonians were bilingual ( $\delta$ í $\gamma \lambda \omega \tau \tau \circ$ ), i.e., they spoke the koine and the local dialect.

The last essay by Professor Julián Méndez Dosuna is a careful and detailed analysis of the linguistic material that speaks in favor of Macedonian being a dialect of Ancient Greek (the socalled "Hellenic Hypothesis", as he notes). The language has many features in common with the North-Western Greek dialects. Dosuna goes on discussing all the evidence in support of his view, e.g., ancient testimonies with regard to the Greek identity of the Macedonians, the glosses from Hesychius' Lexicon (5th c. AD), like à $\delta \tilde{\eta}$. oủpavó¢. M $\alpha \kappa \varepsilon \delta o ́ v \varepsilon \varsigma ~(A G ~ \alpha i \theta \eta ́ p), ~ \delta \omega ́-~$

$\kappa \tau \varepsilon i ́ v \omega v$ (possibly * $\theta$ avó $\omega$ = AG $\theta \alpha v \alpha \tau o ́ \omega$; cf. Maced. $\delta \alpha ́ v o c$ for AG $\theta \alpha ́ v \alpha \tau o \varsigma ~ a c c o r d i n g ~ t o ~ P l u t a r c h ~ 2.22 c), ~ \gamma o ́ \lambda \alpha ~(\gamma o ́ \delta \alpha ~ m s) ~ ह ै. v \tau \varepsilon-~$ $\rho \alpha$ (perhaps yo $\lambda \alpha \dot{\alpha}=$ Attic xo $\lambda n$ ' 'gall, bile', Homeric xo $\lambda \alpha ́ \delta \varepsilon \varsigma$ 'in-


 inscriptions, with the most significant the curse tablet of Pella dating to ca. 380-350 BC. In his study Dosuna offers an in-depth and fully documented analysis of the available evidence and its special characteristics, mainly from the point of view of phonetics and phonology, proving the close connection of Macedonian to the rest of the ancient Greek dialects. Of course, Macedonian also shows certain phonetic features that differ from all other Greek dialects, e.g., the voicing of the voiceless stops /p $\mathrm{tk} / \mathrm{to}[\mathrm{bdg}$ ] and of the voiceless continuants / $\mathrm{f} \theta \mathrm{s} \mathrm{x} / \mathrm{to}[\mathrm{v} \partial \mathrm{z}$ $\gamma]$, although with regard to this point one could think of similar changes that took place in other dialects of Greek later on, i.e., the pronunciation of $/ \mathrm{bdg} /$ as continuants $[\mathrm{v} \partial \mathrm{\gamma}]$ rather than as voiced stops, a suggestion first made by $G$. Babiniotis several years ago.

In conclusion, the four essays of the book help in a decisive way in clarifying the identity of the language of the kingdom of ancient Macedonia. The historical evidence, the archaeological finds along with elements of culture, together with the philological and linguistic material no doubt place Ancient Macedonian among the dialects of Ancient Greek. More particularly the last two essays by Emilio Crespo and Julián Méndez Dosuna, who analyze and discuss the linguistic evidence, classify Macedonian among the North-Western Greek dialects with strong similarities to the Doric group. When the historical, archaeological, philological, and other relevant evidence aligns with the linguistic evidence the final outcome is a much more complete and fuller picture, something that is the aim of this volume and, hopefully, the end result of the combined evidence of the essays in it.

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# The history of Macedonia in the pre-Hellenistic period* 

* All dates in this article refer to BC age.

1 In contrast, today there is a considerable number of histories of Macedonia, of which only some are mentioned here, primarily the most recent: Geyer 1930; Hammond 1972; Hammond \& Griffith 1979; Sakellariou 1982; Errington 1986; Borza 1990, 1999.

2 For an assessment of both texts and additional sources concerning the early history of Macedonia see Zahrnt 1984.

1
Introduction
Though histories of Macedonia were written on numerous occasions in antiquity, none of these have come down to us. ${ }^{1}$ As a rule, information about Macedonia during the period before Philip II was passed on only when it or its rulers became involved in Greek history generally or when they had diplomatic, military, or some other type of relations with specific Greek city-states; within this context, historians had the opportunity during their examination of Greek history to consider Macedonia as well. This happened to a greater extent for the first time during the age of the Persian Wars, when Macedonia twice came under Persian control, the Persian King Xerxes twice marched through its territory, and the Macedonian King Alexander I was forced to take part in Xerxes' campaign against Greece. Macedonia once again appeared on the Greek horizon when during the Pentekontaetia the Athenian naval state expanded to its borders and clashes became inevitable. Finally, many links with Greek history resulted during the Peloponnesian War, particularly its first half, when military operations were conducted chiefly in the Chalcidice peninsula and neighboring regions, and when the Macedonian King Perdiccas II sided alternately with the Athenians and the Spartans. We owe our most valuable information on the ancient history of Macedonia down to the end of the 5th century to Herodotus and Thucydides, the former a historian of the Persian Wars, the latter of the Pentekontaetia and the Peloponnesian War. Neither author was chronologically far-removed from the events they were describing; by virtue of their travels they were somehow familiar with the conditions in the region, and in their works they added a digression on the earlier history of Macedonia: Herodotus (8.137ff.) on the founding of the kingdom of Macedon, and Thucydides (2.99) on its evolution down to the Persian Wars. Herodotus took as his starting-point the narrative of a mission of King Alexander I of Macedon to Athens in the spring of 479, and Thucydides began from the description of the incursion of the Thracian King Sitalces against Macedonia in late fall 429 , which took place with the Athenians' consent. ${ }^{2}$ Herodotus and Thucydides examined early Macedonian history, starting from descriptions of events in Greek history, since for both historians events in the two regions were interconnected.

Herodotus mentions three brothers, descendents of Temenus (and thus of Heracles, son of Zeus), who left Argos and arrived via Illyria in Upper Macedonia - in Herodotus, this term denoted the area between the Pierian Mountains and Mt. Olympus. There they entered service as shepherds in the court of the local king. When the king expelled them not long afterwards, after crossing a river they came to another part of Macedonia, where they settled in the
foothills of Mt. Bermion near the so-called "Gardens of Midas". They conquered this region, and with it as their base they conquered the rest of Macedonia. The youngest brother, Perdiccas, became the founder of the dynasty. This history of the founding of the Macedonian kingdom takes us to the area around the lower Haliacmon, which Herodotus considered to be the region on either side of the river, which he called Makedonis. Here on the northern slopes of the Pierian Mountains, the existence of Aegae, the first capital of the Macedonian kingdom (i.e., modern-day Vergina with its renowned tombs), has been confirmed for some decades now.

It is here where the process of forming the Macedonian kingdom began from the mid-7th century BC. Initially the Macedonians conquered Pieria south of the mouth of the Haliacmon, followed by Bottiaea, which extended around the Thermaic Gulf as far as the Axius. They then crossed the river and conquered the plains area as far as modern Thessaloniki. Thus they prevailed throughout the entire Thermaic Gulf region; finally, shortly before the end of the 6th century, they also conquered the neighboring regions to the west and northwest, viz. Eordaea and Almopia. Eordaea extended westward beyond the mountain range that encloses the central plain. Its conquest made possible expansion towards Upper Macedonia, where lay Lyncestis, Orestis, and Elimeia, regions surrounded by mountains that had their own rulers. The extent to which they belonged to the kingdom of Macedon depended on the power of successive central regimes. In any case, these regions would only come under the rule of the Macedonian king after the failure of Xerxes' expedition.

## 2

Early history of Macedonia
The earliest beginnings of Macedonian history remain shrouded in darkness. Our first reliable information concerns the age of Persian dominance over European territory. ${ }^{3}$ In 510 , the Persian general Megabazus conquered the northern coastal region of the Aegean and accepted through diplomatic channels the surrender of then-king Amyntas I. Thus Macedonia, still weak and confined to the plain around the Thermaic Gulf, came under Persian domination without a fight, to all appearances as a vassal state under the governance of the local dynasty. The first king was Amyntas I, who ca. 496 was succeeded by his son Alexander I, under whose rule the country succeeded in throwing off the Persian yolk for a number of years, since the Ionian revolt had interrupted relations with Persian vassal and subject states in the Balkans. During this period of a free Macedonia, specifically in 496, Herodotus mentions that Alexander I appeared in Olympia. Apparently Alexander was the first Macedonian to participate in the Olympic Games, having first been compelled to prove his Greek descent. Four years later, freedom was already a thing of the past, since after the suppression of the Ionian revolt and the recovery of the regions on either side of the straits of the Hellespont, the Persian general Mardonius appeared with both land and sea forces to reestablish Persian rule as far as the borders of Thessaly.

Thus were created the presuppositions for the campaign of Xerxes (480/79), in the course of which Persian land forces, after marching through Thrace, met up with the fleet that was sailing along the coast at Therme (the area of modern-day Thessaloniki). Alexander was consequently forced to accompany the Persian army, and thus we find Macedonian soldiers and their king following the Persian army until the Battle of Plataea. But when the Persians were defeated at Plataea and their surviving forces withdrew from Europe, Alexander appears to have defected from the Great King, first turning against the Persians who were in retreat and shortly thereafter occupying

3 On Macedonia during the period of the Persian Wars see Zahrnt 1992 and 2011.

4 Regarding these events and their description by Thucydides see Zahrnt 2006a, as well as Zahrnt 2010 for the importance of Macedonia in the outbreak of the Peloponnesian War.

Ennea Hodoi (the later Amphipolis), which as until then had been under Persian control. There he took so many soldiers as prisoners of war, that by selling them as slaves he was able to construct a gilded statue which was set up in the temple portico of Delphi, where there were other dedications by states of mainland Greece and Sicily in memory of the Greek victories at Salamis, Plataea, and Himera. Apparently the Macedonian king, who had for about a year been on the side of the Persians, succeeded in gaining acceptance to the group of "Persian War victors". He also managed to persuade Herodotus that he had always been a secret supporter of the Greeks. The picture provided by Herodotus of this friend of the Greeks on the Macedonian throne exerted a lasting influence, and resulted in Alexander himself -who in his time had collaborated with the Persians- acquiring the epithet "Philhellene", in contrast with the other Alexander, who fought against the Persians and was later called "the Great".

Alexander not only turned against the retreating Persians; he also conquered the regions between the Axius and the Strymon, namely Crestonia, Mygdonia, and Bisaltia. This very quickly brought him into conflict not only with neighboring Thracian tribes, but with the Athenians (cf. Zahrnt 2007), whose naval state after Xerxes' failed campaign included a large number of Greek cities along the shores of the northern Aegean. In the Strymon area in particular, the Athenians had become disagreeable antagonists, for they had set their sights on the forest wealth in the country's hinterland required for ship construction, as well as the mines located there. One of the few pieces of information we have for this period is a mention that following his return from Thasos in 463, the Athenian general Cimon was accused of acting against Athenian interests, since it was presumed that he was bribed by King Alexander not to exploit the opportunity for further conquests in Macedonia, though this would have been an easy matter following the victory against Thasos. It is also significant that a few years earlier, the Athenian politician Themistocles, who had been ostracized and condemned to death in absentia, found refuge at the court of the Macedonian king after fleeing Athens. Furthermore, the Mycenaeans who escaped from their homeland in the wake of Argive attacks, managed to settle in Macedonia under Alexander's protection. His son Perdiccas, following his father's example, also received, in 446, the Histiaeans, who were expelled from their homeland at Euboea by the Athenians in 446.

When Alexander died in the mid-5th century, he had apparently not sufficiently ensured the succession among his five sons, among whom Perdiccas II appeared as successor, while in the following period two of his brothers appear exercising power in different parts of the Macedonian kingdom. Athenian attempts to settle colonists along the Macedonian borders continued and indeed enjoyed partial success, as e.g. in 436, when Amphipolis was founded on the lower Strymon. This city controlled passage across the river as well as the route into the hinterland. ${ }^{4}$ However, when the Athenians got to the point of supporting an internal rival to Perdiccas, his brother Philip (who ruled the area around the Lower Axius, from which he was later expelled) as well as Derdas of Elimeia, Perdiccas abolished the alliance he had concluded with with the Athenians during the first years of his rule and in 433 pursued collaboration with disgruntled Athenian allies in the Chalcidice on the one hand, and on the other with Sparta and Corinth, which after its defeat in Corcyra (Corfu) was seeking revenge. And in fact, in the following year the Macedonian king managed to incite the Corinthian colony of Potidaea on the isthmus of Pallene, the inhabitants of Bottiaea further north, most of the Chalcidians who dwelt in Sithonia, and a large number of inland cities, to revolt against

Athens. Throughout the entire war he made land available for settlement in Mygdonia to those Bottiaeans and Chalcidians who revolted. ${ }^{5}$

Thus the Athenians found themselves in 432 facing not only the Macedonian king, but also those of their allies who had revolted, incited by Perdiccas. Hostilities soon focused on recovering the cities that had revolted; a temporary agreement was achieved with the Macedonian king in 432, and an alliance was formed in 431. But as early as the summer of 429, Perdiccas was secretly sending a thousand Macedonians to Acarnania to support the Spartans. The Athenians became aware of this and so in the following winter incited the Thracian king Sitalces against the Macedonian king; Sitalces' invasion in Lower Macedonia was an utter failure. The chief contribution to saving Perdiccas belonged to the cavalry of Upper Macedonia. For the next four years Perdiccas was left in peace by the Athenians, who had then undertaken operations on other fields of battle. The victories they achieved called forth fear, however, so in concert with the Chalcidians Perdiccas incited in 424 the dispatch of a Peloponnesian force to the northern theater of war. He was primarily interested in receiving military support against Arrhabaeus, the ruler of Lyncestis. Indeed, Perdiccas twice managed to prompt his new allies to intervene in Upper Macedonia, though without the successful outcome he had hoped for, and so in $423 / 2$ he once again entered into a treaty with the Athenians, which he maintained for about five years, until he once more temporarily won over Athens' rivals. A similarly questionable policy may have enraged both the Athenians as well as the Spartans, though in regard to Perdiccas we should bear in mind that he needed not only to defend himself against the Athenians, but also to confront efforts to gain independence by the rulers of Upper Macedon. It must also be acknowledged that he managed to successfully maneuver his way between warring parties and thus preserve to a considerable extent the independence and territorial integrity of his kingdom.

Fate reserved a more fortunate period of rule for his son and successor Archelaus (413-399), since following the Sicilian disaster pressure by the Athenians had ceased. Relations with the Athenians were at once reversed, since the latter depended on Macedonian timber for shipbuilding. Archelaus' essential importance during this period was in the field of domestic policy, military reforms, and cultural aspirations. Thus, he not only promoted the establishment of cities in Macedonia ${ }^{6}$ and hastened the extension of its road network, but also embarked on the formation of a heavily-armed infantry. At the same time, he secured and partly extended the boundaries of his kingdom. His "cultural policy" was especially noteworthy. To be sure, Pindar had already composed an encomium to Alexander I and indeed it is presumed that the poet had resided for a time in his court, just as Melanippides the dithyrambist of Melos and Hippocrates of Cos later sojourned at the court of his successor, Perdiccas II. Macedonia's substantive integration into Greek culture, however, was owed to Archelaus. He entrusted the decoration of his palace to the outstanding painter Zeuxis, and invited numerous Greek poets to his court, including the epic poet Choerilus of Samos, the musician Timotheus of Miletus, as well as the Athenian tragic poets Agathon and Euripides, who inter alia produced his tragedy the Bacchae there. Finally, to Archelaus is owed the establishment of gymnastic and musical contests, the Olympia, which henceforth took place as national Macedonian contests at Dion, in the foothills of Mt. Olympus. In the final years of his reign, Archelaus successfully intervened in Thessaly on behalf of the persecuted aristocratic family of the Aleuadae, realized territorial gains, and secured his influence in Larissa. And so the presuppositions for further expansion of Macedonian power were already a given when Archelaus was assassinated in 399.

5 On this issue as well as further on relations between the Macedonians and Chalcidians cf. Zahrnt 1971.

6 On urbanism in Macedonia cf. Hatzopoulos 1996, especially p. 469ff. on the importance of Archelaus. See also Muller in this volume.

## 3

Macedonia during 399-359
An American colleague astutely observed: "Macedonian kings tended to die with their boots on" (Carney 1983, 260), and indeed the years between 399 and 359 were rife with turmoil and disputes over the throne, by reason of which Macedon was unable to retain the position it had achieved under Archelaus. It was only in the second half of these forty-odd years that there were some intervals during which Macedon not only managed to consolidate its power domestically, but also to present some power in foreign affairs. We shall now show when and how this once more became possible.

During just the first six years of this period, the Macedonians had no fewer than four kings, of whom we know only that most met a violent death. We can gain a clearer picture of Macedon's problems during the early years of the reign of Amyntas III, who managed to ascend to the throne in $393 .{ }^{7}$ As soon as he assumed power, he was threatened by the Illyrians and concluded a defensive alliance with the Chalcidian League (Koinon), which after the Peloponnesian War had become an important power along the Aegean's northern coast. The cost of this alliance for Amyntas was the concession of Anthemus, a fertile valley southeast of Therme. It was only in the second half of the 380 s that he had secured his rule sufficiently to be able to request the return of the lands he had earlier conceded to the Chalcidians. Not only did the latter refuse; they attacked Macedon and forced Amyntas to turn for help to the Spartans, who in 382 sent an expeditionary force to the north. After three years of war, they compelled the Chalcidians to dissolve their Koinon. According to Xenophon, the Spartans and their allies assumed main responsibility for waging this war. The Macedonians did not seem to have any memorable military participation, though there was a valuable contribution by the cavalry of Derdas, ruler of Elimeia and his cavalry. Derdas and his region are described as being independent of the Macedonian king, and it appears that the other rulers of Upper Macedon became independent at that time.

Isocrates also expressed his opinion of these events. In his Panegyric (published in 380), Isocrates condemned Spartan policy of that time in harsh language, mentioning as an example the fact that the Spartans helped the Macedonian king Amyntas, the Sicilian tyrant Dionysius, and the Persian Great King in order to strengthen their domination. If Isocrates wished to be seen as credible in his condemnation of Spartan policy, he could not have included in the trio of rulers on the borders of the then- Greek world of city-states an utterly insignificant Macedonian king. Similarly, the Athenian Aeschines characterized Amyntas as a major political factor, when at a trial in 343 he mentions that in the 370s Amyntas had sent a delegation to a Panhellenic congress, and was complete master of his own decisions. It was precisely at this time that Amyntas became sought-after and the Athenians concluded an alliance with him, the contents of which are unfortunately not known but which would certainly have concerned the forced expansion of Athenian sea power. We learn that as early as 375 the timber required for shipbuilding was coming from Macedonia. Consequently, there was once more a demand for Macedonian ship-building timber, and thus this agreement is a further proof that the kingdom of Macedonia had returned to the ranks of those states in a position to pursue an independent policy. Amyntas did the same thing in the 370s against his southern neighbors as well, when he not only regained rule over Elimeia, but established the boundaries between this region in Upper Macedonia and Perrhaebian Doliche. In addition, family bonds were created with Sirras, the ruler of Lyncestis whose daughter became Amyntas' second wife in the first half of the 380s at the latest and who presented him with three heirs:

Alexander II, Perdiccas III, and Philip II. Thus we see that in the 370s, Macedonia had regained strength, and that Amyntas III was himself able to take up Archelaus' ambitions regarding foreign policy.

For the negative image of Amyntas formed both by later sources as well as modern scholars, his son Philip II is unintentionally responsible, as the latter not only overshadowed all his predecessors with his achievements, but led many historians to distinguish him as the god-sent savior of a Macedonia sunk in chaos. In fact, Amyntas with persistence and vigor gradually managed to overcome the chaos created after Archelaus' assassination as well as to benefit from power shifts around Macedonia, and thus bequeath his sons a relatively stable kingdom.

The succession to the throne in 370/69 was a smooth one, which shows that by this time Amyntas had secured order in the realm. In the meantime, the Illyrians were of another opinion, and invaded Macedonia. A relative of the royal house living in exile took advantage of the justified absence of the young king Alexander II and attacked Macedonia from the East. At this difficult moment, the queen mother Eurydice requested assistance from the Athe- nian general Iphicrates, who was already engaged in military operations in the lower Strymon. He gladly seized the opportunity to put the Macedonian king in his debt, which he managed to do, expelling the would-be usurper of the throne. Thus Alexander's rule was secured, and shortly afterwards he too went into action, rushing to the aid of the Aleuadae in Larissa against the tyrant of Pherae. The Macedonian king made his appearance, taking the cities of Larissa and Crannon, which he kept for himself. The Thessalian nobles were not anticipating such a turn of events and for this reason turned for help to the Thebans, who sent their general Pelopidas. ${ }^{8}$ The latter, marching northward with his army, freed Crannon and Larissa from Macedonian rule. In the meantime, Alexander II was forced to return to Macedonia, as his brother-inlaw Ptolemy had revolted against him. Both parties in this civil war appealed to Pelopidas and invited him to serve as arbitrator. He assumed the role of mediator between the opponents. To ensure the durability of the settlement imposed by Pelopidas, Alexander surrendered to him his youngest brother Philip as well as thirty of the sons of noble families. And so we see that Macedonia's position of power as achieved by Amyntas III and inherited by Alexander II was once again lost, and that the Macedonian state once more came under the influence of successive ruling powers in Greece, and this through its own fault. This situation would continue for a little longer; shortly after the withdrawal of Pelopidas following the settlement of civil strife in the winter of $369 / 8$, Alexander II was assassinated.

One of his closest relatives, Ptolemy undertook the government management as the guardian of Perdiccas, Alexander's younger brother. However, the friends of the murdered ruler considered Ptolemy a usurper and in the summer of 368 turned to Pelopidas, who once again invaded Macedonia. Ptolemy was compelled to declare his willingness to conclude an agreement and commit himself to ensuring power to Alexander's brothers Perdiccas and Philip. Furthermore, he was forced to enter an agreement with Thebes and provide hostages to guarantee he would honor the agreement. Macedonia became yet again a pawn in the hands of foreign powers as a consequence (yet again) of internal unrest.

In 365 Perdiccas III managed to free himself of Ptolemy's guardianship. Soon after assuming power, he deemed it proper to rely on the Athenians and in collaboration with their general Timotheus -who was then conducting military operations along the Macedonian coast and appears at this time to have conquered the cities of Pydna and Methone, which were independent

8 On the history of Macedonia during the Theban hegemony cf. Hatzopoulos 1985.

9 Literature on Philip II: Ellis 1976; Cawkwell 1978; Griffith 1979; Hatzopoulos \& Loukopoulou 1980; Bradford 1992; Hammond 1994a; Le Rider 1977, 1996.
of Macedonia- appears to have marched with him against the Chalcidians and Amphipolis. In the Chalcidice, Timotheus subdued Potidaea and Torone, but accomplished nothing against Amphipolis. Collaboration with Timotheus opened the Macedonian king's eyes to the Athenians' expansionist ambitions, but also to their -after all- limited capabilities, thus enhancing his own selfconfidence. In any case, Perdiccas soon defected and secured Amphipolis, installing a military garrison there. On the whole, Macedonia acquired a new impetus after Perdiccas, as the legitimate successor, rose to the throne by brushing aside initial difficulties. He was now able to advance the further consolidation of the state and secure it from outside threats. In $361 / 60$, the politician Callistratus, who had escaped from Athens, undertook to reform the customs system of Macedonia and significantly increase its revenues. Furthermore, it would seem that Plato's student Euphreus, who remained for quite some time at Perdiccas' court, together with Plato induced the king to cede part of the rule of eastern Macedonia to his brother Philip. Also, it appears that Perdiccas subjugated the principalities of Upper Macedonia anew. Finally, he decided to confront the Illyrians, who from the time of Amyntas III had been striking Macedonia continuously, and to expel them. In the end, however, he was crushed and fell on the battlefield with 4,000 of his Macedonians.

## 4

## The period of Philip II

4.1

The expansion of the kingdom and the relations with southern Greece
In this situation, Perdiccas' brother Philip proceeded with determination, military competence and diplomatic skill, with the goal of first stabilizing Macedonia and then leading it on an expansionist course, taking full advantage of opportunities as these appeared. ${ }^{9}$ He soon managed to sideline the pretenders to the throne who almost always presented themselves at such moments in Macedonia, and then to proceed to securing the borders of his own kingdom and those of neighboring regions. In this effort he met the following situation then prevailing in Greece: The Spartans, who had been behaving for years like the rulers of all of Greece, and who between 382 and 379 had even intervened on behalf of the then-king of Macedonia, had lost their leadership position in the wake of their defeat at Leuctra (371). Between 357 and 355, the Athenians became embroiled in disputes with some of their allies, and the Second Athenian League had at all begun to break down. Theban power was also gradually waning: while a decade earlier the Thebans had exercised a decisive influence as far north as Macedonia, and even into the Peloponnese, they were now failing in their attempt to rein in the neighboring Phocians. Around the beginning of summer 356, the latter occupied the Delphic sanctuary and managed with the aid of its accumulated treasures to form a large mercenary army and prevail over the other members of the Amphictyony. Finally, even the situation in Thrace favored Philip, since the local king Cotys, who had once more managed to unite his realm, was assassinated in the summer 360 and Thrace disintegrated into three individual kingdoms due to the ensuing conflicts over the succession. Thus, in the 350s Philip had already achieved noteworthy victories on all the borders of his kingdom.

The western and northern borders presented the fewest difficulties: In early summer 358 Philip marched against the Illyrians, who were compelled to concede extensive territory as far as Lake Ochrid. Two years later, when the Illyrian king allied himself with the Paeonians, Thracians, and Athens against Philip, it was sufficient to send his trusted general Parmenion against him. After this, calm prevailed in the region for more than a decade, chiefly because
in the late 350 s the region had been further secured when Philip installed his brother-in-law Alexander as ruler of Epirus, thus making the country a sort of vassal state, while he also annexed Parauaea, which lay between Epirus and Macedonia. Among the neighboring peoples who had hoped to benefit at Macedonia's expense following the defeat of Perdiccas II were the Paeonians, settled in the middle Axius. Initially Philip managed to reassure them with money and promises, but later, when they attacked, he defeated them and compelled them to submit. In 356 the king of the Paeonians joined the abovenoted alliance; shortly afterward his country was definitively subdued.

In 357, Philip began to advance eastward completing his rule along the Macedonian coast. He first took Amphipolis, which controlled both the Strymon passage as well as access to the inland region, where the wealth-producing sources of precious metals and timber reserves were located. ${ }^{10}$ Not long afterward, he attacked Pydna on the Macedonian coast. The Athenians, who at the time held Pydna and were exerting claims on Amphipolis, declared war. Philip, however, responded to their declaration by approaching the Chalcidian League, to which he promised the Athenian city of Potidaea. This must have happened in the following year (356); however, while he was besieging the city, he received a request for assistance from the Greek inland colony of Crenides near Neapolis (modern-day Kavala), which was being threatened by a Thracian ruler. Philip appeared suddenly and installed a military garrison in the city, which he re-founded by giving it the name Philippi. ${ }^{11}$

With this city, Philip acquired not merely one more strategic site in the east, but also secured the opportunity to exploit to his own profit the rich gold deposits of the Pangaion to his own advantage. Naturally the ruler of the Thracians in whose region Philippi was located was added to the above-noted alliance, and at the end of the year became subject to Philip, while the latter further expanded his rule as far as the Nestus. In fall 355 Philip attacked Methone, the last strategic Athenian site on his coast, and following a long siege succeeded in forcing it to surrender. This was also a propaganda victory, since the Athenians had offered no assistance to the city, though after the conclusion of the war against their allies they were free to do so. Philip considered this worthy of a second attempt. In spring 353 he marched east of the Nestus, to damage the Athenians' allied Greek cities along the coast and impress the Thracian ruler of the region. This brief experiment apparently had a happy outcome for Philip. In the fall of 352, Philip returned to Thrace and advanced with lightning speed beyond the river Hebrus (modern-day Evros) against Cersobleptes, the ruler of the easternmost of the three Thracian kingdoms, who was also forced to surrender as vassal.

The operations described to this point primarily served the securing and expansion of the Macedonian state, and were directed by all the Greek citystates against the Athenians. However, between the two campaigns to central and eastern Thrace, events occurred that were to ensure Philip decisive influence in central Greece. The active rulers among his predecessors had always pursued three objectives: subjugation of the rulers of Upper Macedonia, conquest of the mouth of the Strymon so that by this route they could secure Bisaltia with its wealth of precious metals and free themselves from any possible Athenian pressure on the shores of their kingdom, as well as the extension of their influence into Thessaly. Philip quickly achieved the first two objectives and indeed surpassed his predecessors in this regard, since to the west he not only subjugated the lands of Upper Macedonia that until that time had been independent, but advanced the western borders of Macedonia as far as Lake Ochrid. To the east, he reached not only the Strymon but as far as the Nestus, gaining control of the precious metal deposits in both Bisaltia

10 On Amphipolis before and after its annexation cf. Hatzopoulos 1991.

11 Collart 1937 is even nowadays worth reading as regards Philippi.

12 On the nature and chronology of these interventions cf. Griffith 1970.

13 On the so-called Third Sacred War cf. in general Buckler 1989. Hammond 1937 remains important for the chronology of the early years of this war.

14 For a list of sources concerning the surrender see Bengtson 1975, 318ff.
as well as the Pangaion. Soon he turned to the third objective he had inherited and turned his influence in Thessaly to good account. ${ }^{12}$ Here he managed to exploit to his own benefit existing tensions between the Thessalian League and the tyrant of Pherae. He intervened for the first time in 358, securing the position of his newly-won friends among the class of Thessalian nobles. Philip intervened a second time in 355 on behalf of the Thessalian League and it was only then that he rendered it capable of undertaking in company with the Thebans the Sacred War against the Phocians, who for over a year had been with impunity in Delphi. Apparently, Philip had realized that the complicated situation in central Greece might give him the opportunity to gain influence here as well through personal intervention; such influence could perhaps be later invoked against the Athenians. ${ }^{13}$

In the fall of 354 it seemed that the Sacred War had come to an end. Philip saw no possibility for intervening in this war, and in the spring of 353 he proceeded against Thrace. But it was at this point that the longed-for turn of events took place in central Greece, i.e., the re-igniting of conflicts between Thessalians and the tyrants of Pherae. The latter turned to the Phocians, the former to Philip. He appeared and initially had a number of victories, but later after suffering two defeats he was forced to withdraw to Macedonia. However, he returned in 352 , assuming general command of the forces of the Thessalian League and inflicted a crushing blow on the Phocians. Not long afterward the Phocians and their port of Pagasae succumbed. It was of course obvious that he needed to exploit his successes to date and legitimize his position as commander of the Thessalian army. And so Philip moved his forces against Thermopylae, then held by the Phocians, in order to deal the decisive blow against the usurpers of the sanctuary. This however was no longer a matter that concerned only Philip and the Thessalians on the one hand and the Phocians on the other. Possession of Thermopylae would now open the way southward for the Macedonian king; so he found the passage closed by the forces of the Phocians, Athenians, Achaeans, Spartans, and the expelled tyrants of Pherae, and was forced once more to retreat. This resulted in the continuation of conflict in central Greece without his participation and the mutual wearing down of opponents. And this of course served Philip's purposes; thus he turned for a time to other targets in the north, i.e., Thrace and Epirus on the one hand, and on the other to restoring his relations with the Chalcidian League. This coalition had by now fulfilled its role as Philip's ally in the war against the Athenians and had been turned into a foreign corps against the ever-expanding Macedonia; its foolishness in refusing to submit gave Philip the chance to intervene, leading in 348 to the destruction of Olynthus, to the League's dissolution, and to the annexation of its territory. Not even the military alliance the Chalcidians had concluded with the Athenians in the summer of 349 protected them from this.

In fact, during all these years, the Athenians had not managed a single military victory against Philip. For his part, Philip had avoided any serious conflict whatsoever with the Athenians; rather, he had provided tokens of his readiness to conclude a peace. At the same time, after 352 his military operations significantly decreased, though he did not give up his goal of playing a leading role in Greece. But he could afford to wait. At last, when in 346 the Phocians were in their death throes, they concluded their capitulation with Philip, and it was to him they owed the milder terms of the surrender in relation to the demands of some of the Amphictyony's other members. ${ }^{14}$ Philip could now believe that he had regulated the situation in central Greece in a manner favorable to himself. Having thus provided for his ongoing influence in this region, he retained for himself the Phocians' two votes on the

Amphictyonic Council, while also taking personal advantage of the votes of the Thessalians and their neighbors.

Shortly before this, e.g., in the spring of 346 , he had also concluded a peace, with the Athenians, the so-called Peace of Philocrates, namely on the basis of the existing status quo. ${ }^{15}$ Thus the Athenians were forced to give up Amphipolis and other regions they had lost along the coast of Macedonia and Thracian. In their place, Philip guaranteed them possession of the Thracian Chersonese, which was of vital importance for the Athenians. He demonstrated in the course of negotiations for peace that this was a genuine act of good will on his part: while consultations were ongoing in Athens regarding the terms proposed by himself in Pella, Philip marched with lightning speed against Cersobleptes and forced him once more to acknowledge Macedonian supremacy. From there it was only a short distance to the Chersonese. Despite the predominance Philip once again demonstrated in 346 , he granted the Athenians a peace on relatively favorable terms. ${ }^{16}$

It would soon be shown, however, that Philip had invested excessive expectations in this peace, and that it was impossible to on the one hand buttress his influence in Greece while simultaneously maintaining good relations with the Athenians. ${ }^{17}$ In the first phase, he confined himself over the next years to consolidating and expanding his rule in the north. In 345 he undertook a campaign against the Illyrians, while in 344 he proceeded to take military measures in Thessaly. In winter 343/2 he appeared in Epirus and by offering its ruler a number of Greek coastal cities thus drew him even closer. Next, an administrative reform was accomplished in Thessaly from which Philip consolidated his control in this region even more. And so, having secured relations in the south (Thessaly), the southwest (Epirus), and the northwest as far as Illyria, in 342/1 the campaign in Thrace could begin.

South of Thessaly Philip was not seeking territorial expansion of his kingdom, though he by no means resigned from expanding his influence there too. At the same time, it became obvious that he was continually currying the Athenians' favor and attempting to avoid a conflict with them. He first demonstrated this in the summer of 346 , when despite their alliance with Philip the Athenians took no part in the campaign against the Phocians, and sent no representative to the Amphictyonic Council. They risked even greater provocation at the Pythian Games by sending no representation to the games being held under Philip's leadership. In light of the Athenians' stance in favor of the Phocians during the ten-year Sacred War and given the general climate that prevailed among the members of the Amphictyony, it would have been easy for Philip to provoke the declaration of a new Sacred War, this time against the Athenians. Not only did he avoid a military operation against the Athenians; shortly later he took care that a decision by the Amphictyonic Council took Athenian interests into account. On the other hand, in 344 he supported Sparta's opponents in the Peloponnese, giving them money and sending mercenaries, thus provoking an opposing mission by the Athenians to the Peloponnese.

Here is revealed the dilemma that Philip could not avoid, and which in the end led to the change in his policy. A good agreement with the Athenians in the wake of the blows against them in recent years would certainly not be easy to achieve. On the contrary, his simultaneous attempts to expand his own influence in Greece must have further disturbed their relations and made rapprochement more difficult. In the beginning, Philip hoped to achieve something with various concessions, and in the winter of $344 / 3$ he proposed to the Athenians negotiations for the revision of the peace treaty of 346 ; the Athenians brought these negotiations to a failure with their excessive demands. In the following year, 343 , Philip reacted by exercising his influence once again

15 For a classification of sources and reference to earlier mentions see Bengtson op. cit., $312 f f$.

16 According to Markle (1974) and Ellis (1982), as of 346 Philip still had the aim of weakening the Thebans to the benefit of the Athenians (something which, as we shall see, actually occurred after the battle of Chaeronea); these plans, however, were thwarted by the machinations of Athenian politicians. Since our main sources for the Peace of Philocrates are the orations delivered by Demosthenes and Aeschines three years later at the trial on the dispatching of ambassadors (On the False Embassy), and since both men spoke at the trial from their own side and in their later references to those events were not objective, Philip's actual intentions can no longer be determined with any certainty; however, we will also see that from that period the Macedonian king was seeking to reach be in good terms with the Athenians.

17 See Wüst 1938 as well as Ryder 1994.

18 For the situation at that period in the Persian kingdom cf. Zahrnt 1983.
on the domestic affairs of Greek cities such as Elis, Megara, and Euboea - in other words very close to Athens. Following this warning, he approached the Athenians in the spring of 342 with a new proposal to better their mutual relations. Upon again meeting with a refusal, he understood that a final confrontation was now unavoidable. However, he himself wanted to determine the conditions under which this would occur. So he now marched to conquer Thrace, which until that time had maintained relations of loose dependence on Macedonia, with the goal of annexing the entire region as far as the Hellespont. Possessing these regions, he could bring the Athenians to their knees.

The campaign against Thrace, however, was not only against the Athenians: The Great King had recovered Cyprus in 344 and Phoenicia in 343, and to judge from ongoing armament, his next objective was to recover Egypt. of course, the picture presented by the Persian kingdom during recent decades ${ }^{18}$ did not comprise an alarming prospect or threat for Macedonia, but then again, a reconstituted Persian Empire could alter the balance of power in the Aegean. However, this could be prevented by the expansion of Macedonia to the Hellespont.

Philip was not the only one who considered a final conflict with the Athenians as unavoidable, although he wished to avoid it; Demosthenes too saw war as the only way out. In contrast, however, with Philip, the Athenian Demosthenes worked with determination towards the goal of bringing this conflict about. In fact he succeeded through targeted provocations to inflame the crisis, and, finally, in the spring of 340 he proposed a Panhellenic alliance against Philip, the Hellenic League, which in addition to Athens included Euboea, Megara, Corinth and its colonies Leucas (Lefkada) and Corcyra (Corfu), as well as Achaea and Acarnania, though it had a purely defensive character.

Following Thrace's subjugation, Philip led his forces against Perinthus, which, however, he was unable to take, primarily because it was supported by the inhabitants of Byzantium and the Persian satraps beyond the Propontis. And so in the fall of 340 he attempted an attack on Byzantium. The Athenian general Chares was sailing with his fleet in the vicinity in order to guide ships coming from the Black Sea loaded with grain through the straits into the Aegean. While this fleet was gathering, Chares met for a discussion with the Persian generals. Philip must now have been definitely persuaded of the inevitability of war, and the Athenian fleet, lying before him like booty ripe for the taking, was a greater temptation than waiting for perhaps a year for a similar chance. And so he took the ships during Chares' absence and together with rich booty found himself with a declaration of war by the Athenians. It must have been obvious to him that this could have been the consequence. One can only wonder whether he actually wanted to eliminate the Athenians in war or whether with this blow against their fleet he wished to persuade them of their naval inferiority too. In any case, the Athenians did not concern him at all; rather he continued his military operations against Byzantium. But the city was now being successfully supported by the Athenians, and in the spring of 339 Philip was forced to suspend operations. But instead of marching against the Athenians, he marched against the Scythians near the mouth of the Danube to secure his new acquisition Thrace on this side as well, before returning to Macedonia through the land of the Triballi. Upon returning he soon received a call for help from his friends in central Greece.

Naturally Philip had not forgotten the Athenians, who until that time had been unable to incite their allies against him, and thus he himself undertook to isolate the city further, sending trusted associates to present an accusation against Athens to the Amphictyonic Council. The reproach lodged against them had been adroitly chosen: during the course of the war against the

Phocians, the Athenians had hung votives in memory of their victory against the Persians and the Thebans in 479 at the sanctuary of Apollo before it was consecrated. The Athenian sacrilege was evident, and due to the majority ratio in the Amphictyonic Council it was anticipated that Athens would be condemned to paying a large fine. Naturally the Athenians would not pay, nor given such cause would the Thebans be able to avoid participating in a due Sacred War for the payment of the debt. This plan, which had been woven with exceptional cunning, failed because Athenian interests at Delphi were being represented by Aeschines' rival Demosthenes, who with exceptional dexterity managed to deflect the Amphictyony's anger onto little Amphissa, so that a Sacred War was on the one hand declared, but took a different course from that Philip had planned. For the Thebans whom Philip had wanted to turn against the Athenians for his own interests without being involved, not only stood by the citizens of Amphissa, but turned against Philip and took control of Thermopylae from him by force. It thus became impossible for the rest of the members of the Amphictyony to lead their troops south and advance against Amphissa. In the fall of 339 they were forced to seek help from Philip, who had just returned from his Danube campaign. And so events led to war in central Greece, which Philip above all wished to avoid, and of course for him to be placed at its head, and which even after its declaration he endeavored to settle it with repeated negotiations. But the decision to militarily intervene was now unavoidable, and the decisive battle took place in early August 338 at Chaeronea, with the Macedonian king emerging victorious. He could now once more regulate his relations with the Greeks. ${ }^{19}$

His long-time ally Thebes was severely punished for defecting to the enemy camp. A permanent Macedonian military garrison was stationed on Cadmea, the Acropolis of Thebes, and exiles were allowed to return, which brought Philip's friends back and led to a change in regime. The Boeotian League was not dissolved, and thus the Thebans, who lost their leadership position in Boeotia, were neutralized. The re-founding of Boeotian cities destroyed by the Thebans during their rule also served this purpose. Consequently, these measures had one and only one goal: the military power of Thebes had to be reduced, and Thebes subjected to the control of hostile neighbors.

In 346 the Athenians had achieved a favorable peace, as far as Greek relations are concerned and concluded an alliance with Philip. This peace and alliance were later extended to Philip's successors, and thus considered "eternal". We have already discussed Philip's pursuit of the Athenians' good will during the following years as well as Demosthenes' effort to frustrate every rapprochement, to create a united front of Greek cities against Philip, and finally to instigate a decisive clash with him. Thus in Philip's eyes the Athenians themselves appeared guilty and made others appear so as well, while deserving no leniency by virtue of their rigid stance. And yet, he showed them unexpectedly great leniency. Despite his negative experiences, Philip dealt with the Athenian democracy with mercy; he left it untouched, and did not even consider invading Attica. Furthermore, he allowed the Athenians to retain their possessions outside Attica, including Lemnos, Imbros, Skyros, and Samos, only compelling them to surrender the Thracian Chersonese to him. Since the Athenians depended on grain imports from the Black Sea region, the loss of the Thracian Chersonese must have forced them to maintain a friendly stance towards Philip, and made them eminently aware of the possibility of a blockade of the Hellespont. Furthermore, the Athenians now had no possibility to prepare or undertake a naval campaign against Philip. For this reason, whatever had remained of the Second Athenian Alliance was now dissolved. ${ }^{20}$

19 For the measures taken at that time cf. Roebuck 1948.

20 On the establishment of peace and an alliance between the Athenians and Philip see Schmitt 1969, 1ff.

21 See e.g. Griffith 1979, 619f; Ellis 1976, 11ff., 92 and Cawkwell 1978, 111ff., a hypothesis made already for the Peace of Philocrates.

We know scarcely anything about the treatment of other Greek cities, especially those whose armies took part in the battle of Chaeronea. Corinth and Ambracia were compelled to receive Macedonian garrisons. Together with Thebes, these were the three locations where Macedonian troops were installed, and this seems to have sufficed for Philip. In any event, these sites were chosen with great care: Corinth controlled access to the Peloponnese, and the order soon imposed there guaranteed the peninsula's good conduct. Ambracia, which lay between Aetolia and Epirus, two emerging regions that until then had been supported by Philip but were unworthy of his trust, controlled northwest Greece. Finally, he knew the Thebans personally and was aware of their efforts to impose their own rule in central Greece. To prevent anything of the sort, his own friends needed to assume the reins of power in Thebes, and since there were not a great many of them and they were confronting the hostility of the Demos, he had to secure their support by the imposition of a Macedonian garrison.

These were the measures taken immediately after the battle of Chaeronea, which however were very different as regards their terms of peace: the treat- ment of former military opponents is in noteworthy disproportion to their actual guilt. And the same is true of the measures Philip took in the Peloponnese. All those who belonged to the opposing alliance in the northern Peloponnese found leniency, while Sparta, which remained neutral, was significantly weakened by being forced to surrender border regions to her hostile neighbors Messene, Megalopolis, Tegea, and Argos to her own detriment. It was not about to eliminate Sparta completely, merely to strengthen its neighbors at Sparta's expense. Of these city-states, none was in a position to assume leadership of the entire Peloponnese. They owed their territorial gains to Philip, and thus as long as Sparta existed and still thought of recovering its forcibly surrendered lands, these states could not forget who their friend and ally was.

Through the arrangements outlined here, Philip ensured that the former ruling powers of Greece would no longer be in a position to play the role of his opponents. All three had been weakened and among other things placed under supervision: the Thebans through the change in government, the possession of Cadmea and the strengthening and multiplying of individual cities in the Boeotian League; the Spartans through territorial losses and distrust of hostile city-states surrounding them, and the Athenians just through the loss of the Thracian Chersonese and the dissolution of what little remained from their naval alliance. The differences in treatment become clearer if we note what the Athenians retained and by comparison what potential was removed from the other city-states. Thebes and Sparta were strong land powers and as such were undoubtedly weakened. Athens' power was based on its fleet, which Philip left under their control, even though he had nothing comparable with which to confront them. The lenient treatment of the Athenians consequently caused greater surprise, and naturally there have been efforts to interpret it. Thus it is presumed that Philip wished to preserve the Athenian fleet to be able to use it later in a war against the Persians. ${ }^{21}$ This also explains Philip's constant courting of the Athenians' good will, which is already clearly discerned as early as 348 . This is undoubted, as such relative leniency towards the Athenians might have been observed in the past.
4.2

Planning the expedition against the Persians
This brings us to the question of whether Philip was seriously contemplating the possibility of a campaign against the Persians and had directed his policy in the southern Balkans accordingly. In our literary tradition, the idea of a
campaign against the Persians is first found in 346 , although in a later source. Diodorus, in continuing his account of the end of the war against the Phocians, speaks of Philip's desire to be proclaimed authorized general of (all) the Greeks and leader of the campaign against the Persians. Diodorus (or his source) certainly knew that this desire, which was attributed to Philip in 346, became reality after the fact, when there was the possibility of an unjustified early dating after the fact. On the other hand, the plan for a war against the Great King was not in itself unrealistic, if we consider the situation in the Persian state as Isocrates describes it in a letter addressed to the Macedonian king in the summer of the same year. The letter's aim was to incite Philip to a campaign against the Persian state. Isocrates could have submitted a similar plan as a proposal to the Macedonian king only if he could count on the latter's considering it feasible due to the underlying balance of power and the situation in the Persian state. Also, this was not the first time Isocrates had publicly proclaimed the plan for a Persian war. Already in his Panegyric (380), he had propagandized for confraternity among the Greeks and a campaign against the Persians, and he could not have hoped for any success with this text if his readers were not persuaded of the possibility of realizing a war against the Great King. One of his readers was certainly Jason, the tyrant of Pherae, who at that time represented the major power in central Greece. Around the end of the 370 s, his announcement that he would undertake a campaign against the Persians had been credible. The historicity of this claim is vouched for: on the one hand, it is mentioned by Isocrates in 346 in his letter to Philip, and on the other hand as a credible intermediary for the ambitions of Jason we have Xenophon, who was no longer living when the work Philip was written, and who presents the tyrant Jason referring to his plans to subjugate the Great King and explaining the possibility of realizing his words as follows: "For I know,... with what type of forces (and this concerned both the army of Cyrus during his advance within the country as well as the army of Agesilaus) the Persian king arrived at the brink of destruction". ${ }^{22}$

Here, Xenophon has Jason argue for military operations in which he himself took part. Isocrates had already given his attention to these examples in 380, and in the 2nd century Polybius benefited by employing them when in referring to Philip's plan for a campaign against the Persian king he offers a flashback of the demonstrated inability of the Persians against Greek armies (Isocrates, Panegyric 142-9; Polybius 3.6.9 14). Polybius does not refer to the time at which this plan was conceived by the Macedonian king, since he was only interested in its presuppositions, which were already given from the early 4th century. After the successful return of the 10,000 (Greek mercenaries), and even more following Agesilaus' operations in western Asia Minor, the incapability and military failings of the Persians had become all too clear. It was consequently entirely realistic for Isocrates in his Panegyric in 380 to mention a Panhellenic campaign against the Persian king. Similarly, shortly thereafter Jason, tyrant of Pherae, could publicly contemplate a war with the Persians without fear of ridicule, since in addition Jason was at that time representing the largest land power in central Greece, i.e., in a region whose general leadership Philip had assumed in 352. And basically, it was only one of the territories annexed by Macedonia, which in the meantime had been consolidated and expanded in all directions. In comparison, during the first years of Philip's rule the Persian state presented an image that made an attack against it more tempting than at the beginning of the century. This was even more the case following the completion of the second phase of Macedonia's rise from 352 to 346 , and at its conclusion Isocrates, in his open letter to the Macedonian king, urged him to undertake a campaign

22 On Philip's presumed plans in 346 see Diodorus 16.60 .5 . For the situation in the Persian state see Isocrates, Philip 99-104, and for Jason's plans see ibid., 119ff.; Xenophon, Hellenica 6.1.12.

23 This is also the view of those scholars mentioned in note 21 above. Among them, Ellis considers that Philip was already toying with the idea of a Persian war from late 350; Cawkwell and Griffith accept something of the sort as certain only during the period of the Peace of Philocrates. Naturally, such a concurrence of views among more recent scholars could not go unquestioned. Thus, Errington (1981) rejects all three of the above termina post quem, attributing to Philip the initial idea for a campaign against the Persians to shortly before the battle of Chaeronea. Since his diplomatic strategy in central Greece failed, he wanted to reconcile the Greeks to Macedonian power; with the plan for a campaign against the Persians he proceeded to a dramatic gesture for the Greeks' part, embracing a national cause as his own. According to Buckler (1996), any possible attempts by Philip to establishing his hegemony in Greece left no traces behind them. As for his ambitions vis-à-vis the Persian state, only assumptions can be made, while his actual objective till the end was the Athenians. Excessive theoretical objections are superfluous after the extensive references in the text.
against the Persians. The success of such an undertaking would now be more feasible. Also, a synopsis of Philip's actions and activities could demonstrate that during his lifetime, his chief concern was Macedonia's power and expansion. From this standpoint, planning for a Persian war might have played a role in his thinking from very early on. Finally, we must ask when something of the sort might have emerged and to what extent it determined his Balkan policy.

Before his rise to the throne, Philip had lived for a number of years as a hostage in Thebes, in the house of the general Pammenes. In early 353, the latter undertook a mission with 5,000 men to Asia Minor, hastening to the aid of the satrap Artabazus, who had revolted. Philip facilitated his passage through Macedonia and Thrace, and consequently was aware of how many soldiers were required for the risky military enterprise against the army of the Great King. In addition, Philip was informed of Pammenes' victories following his break with Artabazus and of his flight to Macedonia. One may thus easily imagine that as early as the late 350s, Philip had turned to the idea of a campaign against the Persians. But the conditions required for such an undertaking and the long absence due to the campaign were not yet favorable. He was already at war with the Athenian naval force, and although the Athenians had not yet managed to injure him -rather, they were losing one after another ally (or base)- nevertheless, as possible allies of the Great King they might still become dangerous. Also, in 352 Philip had secured Thessaly against the tyrants of Pherae and the advance of the Phocians, but had not managed to take Thermopylae. And thus the possibility to exercise a decisive influence on affairs in central and southern Greece did not yet exist.

Philip, however, could prepare for a war against the Persians in another way. Immediately after his withdrawal from Thermopylae, he led his army against Thrace as far as the Propontis. This campaign was naturally also a show of force to the Athenians, a clear warning that at any time he could threaten their grain imports and holdings in the Chersonese. The subjugation of Cersobleptes, however, as Philip's vassal and the Macedonian king's alliance with Byzantium, and perhaps with other cities along the coast, simultaneously secured a region that would someday be needed for the land army's march against Asia Minor. The plan for such a campaign, which was already playing some role in Philip's thinking, must have seemed even more appealing shortly afterward, when the Great King not only failed yet again to recover Egypt, but unrest broke out in Egypt's neighboring satrapies in consequence of this defeat. It does not seem to have been a coincidence that beginning in the fall of 351 and for the next year and a half, we hear nothing about military operations by Philip against the Athenians, and that these started once again only in connection with his attack against the Chalcidian League, while even during that period Philip continued his peaceful overtures to the Athenians. So there is much to argue in favor of the hypothesis that as early as the late 350 s, Philip had conceived the plan for a war against the Persians, and that his policy toward Greece was directed towards this end. This policy may have relied upon the following thinking: for a campaign against the Persians, Greeks were needed, if not as co-fighters then at least as favorably-disposed, neutral observers, and he had to ensure that they would not be aroused by the Great King behind his back, and perhaps cause difficulties. The latter chiefly concerned Athens, whose city and harbor formed a city-wall which could hardly be conquered and which could in no case become a Persian military base on European territory. It would be preferable, of course, to win over the Athenians and their naval experience for himself, so that he could oppose the Persian fleet with an equivalent force. ${ }^{23}$

Upon grasping Philip's intentions, one will better comprehend his policy towards the other Greek city-states, which was entirely different from that towards the barbarians of Illyria and Thrace, whom he frequently attacked without showing any particular restraint. Philip struck against the Greeks only when absolutely necessary, but with such force that a single strike was sufficient. After his victory, he showed a proper clemency. But he preferred whenever possible to avoid war against the southern Greeks altogether. The latter proved an illusion, but after the victory at Chaeronea, Philip once again managed to regulate his relations with the Greeks in the south and once and for all lay firm foundations for his future plans. The goal of creating the presuppositions for his safe and lengthy absence and a successful attack on the Persian state was served by the arrangements instituted immediately after his victory, which are easily understood within the framework here described. Both his generous leniency towards the Athenians as well as his harsh treatment of the Thebans were in Philip's interest. In contrast to the case of the Athenian fleet, it appears that participation by Theban hoplites in a war against the Persians had less significance; Philip could recruit a sufficiently large infantry force in Macedonia. On the other hand, the Thebans were still the strongest Greek land power, and by virtue of their political ambitions could prove dangerous if they disturbed the peace in central Greece during Philip's absence.

With the exception of the Thebans, Philip normally reserved lenient terms for his war adversaries, but despite his moderate behavior towards them created sound foundations for the consolidation of Macedonian rule in Greece. Furthermore, as regards the Spartans he had weakened a neutral but potentially dangerous power. In the end, however, these were only partial measures, and Philip rightly doubted the extent to which they comprised as a whole a solid foundation for the control of Greece. For this cause, he would need an arrangement that included all the states and that would not automatically be seen as a means for imposing Macedonian supremacy. The best thing would be a common institution, something already existing in Greek tradition, but which would not refer to the hegemonic systems of the Athenians, Spartans, or Thebans.

Thus, Philip conventionally secured the status quo he himself had effected with a Panhellenic peace treaty (the common peace), the so-called League of Corinth, which would also form the basis for Alexander's relations with the other Greek states. ${ }^{24}$ In the first half of 337, at Philip's invitation there convened in Corinth representatives of the Greek states, and as had happened in previous treaties of common peace, they agreed to a common peace for the freedom and autonomy of all Greeks. Not only were military attacks against each member of this peace forbidden; the agreement, in addition to guaranteeing the existing territorial integrity of member-states, also guaranteed their existing constitutions from being overthrown. Furthermore, the agreement included a mandatory enforcement clause that obliged each signatory to provide military assistance to victims of attack, and to consider all those who disturbed this peace as enemies. Earlier peace treaties had also contained a similar clause, except that in these there had been the problem of how it could obligatorily be determined who had violated the peace, and how sanctions against the violator were to be valid. For the first time institutions were created which would not only oversee the observance of its provisions, but which would take all necessary measures to restore the order when needed. At the heart of this common peace was a "Council", a committee (Koinon) of the Greeks, on which all participants were represented by delegates whose decisions were binding for all members. For the implementation of the decisions of the "Council", there was created the office of "hegemon", who

24 For an overall and detailed appraisal of the sources see Schmitt 1969, 3ff. Jehne 1994, 139ff. is fundamental regarding Philip II's League of Corinth. Cf. Perlman 1985 for further information on the "background of the inter-state relations during the 4th century".
assumed the leadership for executive decisions by the Koinon. As was to be expected, Philip was elected to this office.

In providing substance to the League of Corinth, Philip established his leadership in Greece on a conventional legal basis, and thus he sealed the rise of Macedonia on an international law. For this, he adopted the existing comprehensive contracts familiar to the Greeks, developing it further after creating a body for supervising and implementing of decisions, and adding the office of "hegemon of the Koinon" with executive responsibility. However, the best provisions and terms in the agreement would have had no value if the leader chosen at that time had not represented a power which no one in the southern Balkans would have dared question, even in the absence of agreements.

The League of Corinth was unquestionably the most effective general peace treaty concluded up to that time, and it seemed that it would speedily guarantee the maintenance of peace. To be sure, this peace had been imposed by the victor and was a means of consolidating his supremacy and guaranteeing his rule in Greece, but on this winner cloaked the whole matter most skillfully in the mantle of a general interstate peace in a form accepted by all been made in Greece over a fifty-year period. It was thus to be expected that specifically the smaller states would welcome the new arrangement, since through it they could anticipate protection from their more powerful neighbors. Also, peace appeared generally secured within Greece now, and for the sake of peace it was possible for a state even to accept some concessions to its independence. But the guarantee of the existing status quo was first and foremost the person of the "hegemon" himself, and the Common Peace, the vow partially preserved in inscriptions, also includes the obligation not to look down on the rule of Philip and his successors. In all this, however, Philip was not aiming at establishing a direct form of rule in the Greek cities, but merely its indirect imposition as a presupposition for a war with the Persians, of which he apparently had in mind to be the leader as early as the late 350 s. The fact that he was continuously forced to postpone these plans was the fault of his opponents in Greece, Athens in particular. Now, however, it appeared that nothing would stand in his way.

At Philip's suggestion, the "Council" of Corinth decided in favor of war against the Persian kingdom. Already in the spring of 336 a Macedonian army of 10,000 soldiers had crossed the Hellespont, initially to incite the Greek cities of Asia Minor to revolt. Philip would follow once his forces were fully armed. But this never happened, because the king fell victim to assassination in the fall of 336 . This time, the change in ruler proceeded without problems. When Alexander embarked on his campaign against the Persians in early 334 , he could act in full confidence on the foundations laid by his father; after some centuries when people began to call him the "Great", they were overlooking the fact that he was actually the son of an even Greater.

## Translation D. Kazazis

# The other Greece: The archaeology of Macedonia 

## 1

Introduction
Macedonia provides a unique image of Greece, firstly from the viewpoint of its geography, with its rich alluvial soil, broad plateaus, and normally smooth coastlines, all of which are in contrast to the fragmentation of the more Mediterranean landscapes of the rest of Greece. But it also is unique from the viewpoint of history: despite the absence of an Achaean kingdom in Macedonia, its transition to the Iron Age coincided according to legend with the installation of a monarchy with its capital at Aegae (modern-day Vergina) and, most importantly, this ancient form of political organization was retained there throughout its entire history, when mainland Greece was divided into poleis. Macedonia -in the wider geographical sense- did not experience the political phenomenon of the city-state except through Greek colonies founded in the northern Aegean during the archaic period. In the 5th century, king Alexander I expanded his realm, which was originally confined to Bottiaea and Pieria, annexing territories to both west and east at the expense of neighboring kingdoms. In the 4th century, two exceptional kings, Philip II and his son Alexander the Great, expanded Macedonia's rule, the former to a large part of the city-states of Greece and the second to Asia, extending the boarders of Hellenism far beyond its natural birthplace.

But Macedonia is also distinguished from the rest of Greece from the standpoint of historiography, since it remained essentially outside the route of the Grand Tour, i.e., the travels of scholars, antiquarians, and the literati who first made the ancient monuments of Greece known between the 17th and 19th centuries. The first scientific mission to Macedonia, under Léon Heuzey, dated to 1861. Although after the liberation of Greece in 1827 there was an enormous effort expended to bring to light the common heritage that contributed to creation of the identity of the newly-formed state, Macedonia remained under Turkish rule until 1912, and the Ottoman authorities there did little to promote archaeological research. After World War I, excavations long retained their sporadic character, since Macedonia did not generate the same interest as the regions which were considered Greek par excellence, viz. the Greece of the city-states. The filling of these gaps has been recent but impressive, albeit still incomplete. It was triggered by spectacular discoveries like that of the monumental tombs of Vergina in 1977, and has benefited from the unique geopolitical situation in the Balkans. During the last few decades, archaeological authorities, above all the services of the Ministry of Culture, Aristotle University of Thessaloniki, and the Archaeological Society at Athens, have intensified both systematic and rescue excavations, e.g., along the route of the new Egnatia Odos, contributing to the substantial enrichment of our
knowledge about Macedonia with the discovery of another Greece, a royal Greece just as admirable as that of the city-states. Without exaggeration, we may say that Macedonia is the place where the renewal of the spirit of classical archaeology is taking place.

Nonetheless, Macedonia cannot offer the imposing ruins of temples or public buildings familiar to us from the rest of Greece. This is not due to the particular cultural configuration of the region, but to the absence of durable building materials, since marble quarrying was confined to the slopes of Mt. Bermion. Hence we observe at the same time the scarcity of monumental buildings, their greater fragility due to the use of soft limestone, and finally the looting of building materials, which was far more systematic than elsewhere, and from which only the monumental tombs escaped as they were protected by being covered by earth.

It is apparent that an account of the entirety of material culture from archaic, classical, and Hellenistic Macedonia, as well as of the high volume of recent discoveries exceeds the possibilities of this brief survey. For this reason we will focus on some key aspects that constitute the uniqueness of Macedonia, and specifically on the fields of city planning and on palace, domestic, and funerary architecture. We decided not to break up the elements that form a unity, seeing thus all types of monuments within their surrounding context, i.e., entire complexes formed by houses, palaces, or tombs. Therefore, the paintings on the funerary monuments, which comprise invaluable evidence as unique examples of large-scale Greek painting which has been irretrievably lost, will be considered within the context of the tombs they adorned. Similarly, the luxury products of industrial workshops will also be examined within the context of the tombs where they were deposited as a sign of piety toward the dead on the part of a particular elite. Finally, the mosaics will be dealt with as part of the complex of houses and palaces.

2
City planning and monumental complexes
2.1

Traditional city planning
Due to the absence of extensive excavations, our knowledge of city planning in Macedonian cities remains inadequate, with a few important exceptions. Ancient settlements developed without a predetermined plan, in accordance with what Le Corbusier called "donkey urbanism" (urbanisme de l'âne), where the road network was determined by the routes followed by beasts of burden. The narrow and winding roads of the old city of Olynthus, founded during the archaic age by the Bottiaeans in the Chalcidice on a narrow hill to the east of the later city, offers one of the most characteristic examples. Recent excavations have provided information about Aiane, the capital of the kingdom of Elimeia in Upper Macedonia. Its houses and public buildings, built incrementally over three successive steep plateaus, reveal a more ambitious form of urban organization as early as the late archaic period, long before the unification of the Macedonian kingdom by Philip II. The urban planning of Aegae, the kingdom's first capital, also appears to have relied on the principle of graduated terraces which extended over the slope below the acropolis.

We do not yet know much about the urban planning of Greek colonies founded during the archaic age in the northern Aegean. However, the examples of Stagira and Argilus, both colonies of Andros, show that the regular plans with which we are familiar from colonies in Sicily, South Italy, and the Black Sea were not the rule.
2.2

The urban planning of the geometers
In the classical and Hellenistic periods, however, many cities were created, refounded, or expanded in Macedonia on the basis of precisely this principle of a regular plan, which was defined by networks of roads intersecting at right angles and which was further elaborated by Hippodamus of Miletus. Olynthus offers our earliest example of this. Historical conditions and the change in the city's role which took place in 432 when it became the capital of the confederacy of the Bottiaeans and Chalcidians, led to the creation of new residential quarters with around five hundred houses. The plateau which extends north of the hill on which the old city was built was divided by four avenues running N-S, built at irregular intervals. These avenues, of which the most important had a width of $9 \mathrm{~m}(30 \mathrm{ft})$, were intersected by twenty roads running $\mathrm{E}-\mathrm{W}$ with a width of $5 \mathrm{~m}(17 \mathrm{ft})$. The roads delimited the residential blocks, which had a width of $35.60 \mathrm{~m}(120 \mathrm{ft})$ and varying lengths, depending on the distance between the N-S avenues. Near the center of this system, through which the main avenue passed, there was a public space where the political perhaps intended for some kind of sanctuary. The new quarters quickly filled with houses that were built along the walls to accommodate the population influx resulting from the Athenian raids against the cities of Chalcidice during the Peloponnesian War. A supplementary residential quarter was built to the east in the first half of the 4th century, shortly before the city's conquest and destruction by Philip II in 348.

Pella -the "greatest city in Macedonia" according to Xenophon (Hellenica 5.2.13) and at the time still a coastal city- also owed its imposing city plan, which appears to have been created in the first half of the 4th century, to its new role after becoming the capital of the Macedonian kingdom by the decision of either Archelaus (late 5th c.) or more likely his successor Amyntas III. On an acropolis with a slight incline, the enormous palace (see below 3.3.2) seemed detached from the city that extended to the south. However, the city and palace were joined in a unique and clearly structured rectangular grid. The E-W roads, separated from one another by 110 to 150 m , were 9 m wide with the exception of the main road, which had a width of 15 m and formed part of the major road artery linking the hinterland of western Macedonia with Thessaloniki. The N-S roads, which were 47 m from one another, were 6 m wide with the exception of the two in the middle, which had a width of 9 m and led from the palace down to the harbor. At the center of this grid, which was delimited by these roads and bisected by the E-W road so as to have a better function, there extended the enormous area of the main financial agora (see below 4). The blocks created by the roads around this central zone included sanctuaries, public monuments, and luxurious private residences (see below 3.2); humbler houses would have occupied the peripheral blocks.

Even though the present state of research does not allow us to reconstruct with certainty beneath Byzantine and Roman levels the residential plans of other classical and Hellenistic cities, we may surmise that the same search for functionality predominated within the framework of a structured rectangular road network. We may cite as examples of this Dion, a mid-sized town that owed its importance exclusively to its role as the sacred city of the Macedonians from the age of king Archelaus, and Thessaloniki, which was founded in 315 by Cassander at the site of ancient Therme. Thus, the Macedonian kingdom participated to a large extent in the urbanization movement that characterized the Hellenistic age.
2.3

The public facilities of cities
For a cultivated Greek of the 2nd century AD, a city that had "neither administrative buildings nor a gymnasium, neither a theater nor an agora, nor a fountain with running water" (Pausanias 10.4.1) was not worthy of being called a city. The cities of Macedonia unquestionably possessed all the public facilities that characterized Greek urban life, even if these remain to a large extent unknown.

Apart from Pella, recent excavations have begun to yield evidence of the public center of ancient Mieza by the foothills of Bermion near Lefkadia (Naousa), although the buildings there have essentially been destroyed down to the base of the walls. The northwest corner of a very ambitious monumental complex (at least $300 \times 100 \mathrm{~m}$ ) manifestly constructed in a uniform fashion in the second half of the 4 th century has been revealed. It included at least three terraces extending over a fairly smooth hillside facing east, surrounded by long stoas (peristyles) and buildings, and connected by staircases and ramps. On the narrow north side of the middle terrace, there was a sort of monumental passageway between two ramps, with an interior wall that included engaged columns, while above this stood a small Doric distyle in antis temple. The complex culminated on the western terrace, which had a large $\Gamma$-shaped structure with eleven hestiatoria (banquet halls) and hydraulic installations. This complex apparently united the public functions of the agora with religious worship, given that it has been proposed that the upper terrace be identified as an Asclepieum. Regardless of its role, however, this particular complex makes Mieza one of the most important cities in the kingdom, offering one of the earliest examples of the enclosed public space of "Ionic type".

Information from literary sources sheds some light to the intellectual life of the Macedonian kingdom, such as the fact that Euripides lived for some years at the court of Archelaus. The Macedonian kings' fondness for literary arts is obvious from the theater located a little below the palace of Aegae. Only the foundations of the skene, the gutter surrounding the orchestra (diameter 28.5 m ), the first row of seats, and the radiating stairs of the cavea (koilon) were made of stone; the remaining structure was of wood. It was in this theater that Philip II was assassinated in 336 while celebrating the marriage of his daughter to king Alexander of Epirus. The sanctuary of the Nymphs near Mieza is also connected with the Macedonian royal house. Within a verdant landscape, a complex of stoas has been uncovered where, according to Plutarch (Alexander 7), Philip II kept Alexander isolated from the court to be educated by his pedagogue Aristotle.

There was also a theater at Dion near the sanctuary of Dionysus, outside the walls south of the city, at least from the era when king Archelaus established dramatic contests in honor of the Olympian gods; Euripides presented his Bacchae there. This classical theater was replaced in the Hellenistic age by a structure that was in many ways innovative. In contrast to the practice in Greek theaters, the koilon was not built on a natural slope, but rather was located atop an artificial fill. On the side of the parodoi, it ended in a simple slope without the usual retaining wall, while the stands were made of large clay bricks that must have had a marble revetment. Marble had also been used from a certain height upward on the imposing skene building which today is largely destroyed, though we can surmise its arrangement -a two-aisled skene with paraskenia on both sides, and a proskenion in front- and its order, which was Doric with engaged columns. Below the orchestra (diameter 26 m ) was a rare detail, "Charon's staircase", through which actors portraying characters ascending from the Underworld appeared.

As regards the gymnasium, a place for physical as well as intellectual training for young Greeks, we have archaeological data only for the one in Amphipolis. Built in the second half of the 4th century, it faithfully followed the established type of the gymnasium at Olympia, including the palaestra $(47 \times 36 \mathrm{~m})$ to which access was provided by a monumental stairway, and two runways (length: 1 stade), one of them covered (the xystos), the other open (the paradromis). The palaestra premises, which were intended for physical exercise, the care of the body (baths), as well as education, symposia, and the worship of Hercules and Hermes, the patron gods of athletes, were disposed around a Doric peristyle courtyard.

Baths were another element of urban amenities. Pella gives us the earliest example of public baths in northern Greece; its baths were built in the late 4 th century in a residential block in the northeast part of the city. This very carefully-finished building -with a monumental entrance, floors with pebble mosaics and marble revetments- included two rooms with assemblages of individual bathtubs, as well as a large pool. Heating was provided by an underground hot-air conduit, which is the earliest forerunner of the Roman hyof the Roman agora, part of a Hellenistic (2nd c.) bath complex has been excavated, where we may discern primarily a lovely circular hall with twenty-five bathtubs, as well as the adjacent tavern.
2.4

Sanctuaries
Although no significant remains of sanctuaries in Macedonia are preserved, there is no doubt that on this aspect the region did not differ from the rest of Greece as regards its pantheon and buildings, or as far as its ritual and votive practices are concerned.

The earliest known sanctuaries are those in Dion, arranged outside the walls south of the city. This location shows that they were the sanctuaries not only of the inhabitants of Dion, but of all the Macedonians, for whom Dion was their sacred city. The most important of these was the sanctuary of Olympian Zeus, where the inscriptions that concerned the common affairs of the Macedonians were set up, and where the great celebration of the Olympia with athletic and dramatic contests was held. At the site, a monumental altar (length 22 m ) has been revealed, with which an innovative mechanism for hecatombs is connected. It allowed thirty-three oxen destined for the same sacrifice to be bound in three rows. The only known example that could be compared with these rows of block on which a ring was fastened is in Ionia, at the sanctuary of Apollo at Claros. Near the sanctuary of Olympian Zeus were the temples of Zeus Hypsistos, Demeter, Dionysus, Asclepius, and Aphrodite and Artemis. The last two were succeeded in the 2nd century by the sanctuary of Isis, with a passageway symbolizing the river Nile leading to the altar, which was adorned with statues of the bull Apis. A number of exceptionally fine sculptures were preserved at this sanctuary, essentially in situ.

Archaeological excavations have brought to light a smaller number of sanctuaries than one would expect in the kingdom's two successive capitals, at least on the basis of the testimony of inscriptions. At Aegae we know of the sanctuary of the Mother of the Gods Cybele in the eastern part of the city, as well as that of Artemis Eucleia on the outskirts of the public area. In this latter sanctuary were found beautiful marble statues, votives by Eurydice, the mother of Philip II. At Pella, a number of sanctuaries with numerous portable finds have been excavated, mainly clay votive offerings: the Thesmophorion, outside the city walls, included a large circular building with carvings of
a ritual purpose hewn in the floor; these may be identified with the chambers (megara) mentioned by the literary sources in connection with the celebration of the Thesmophoria. A sanctuary of Aphrodite, another dedicated to the Mother of the Gods, and a third dedicated to a local hero-healer, Darron, with an unusual circular building surrounded by three small satellite tholoi have been found within the walls.

## 2.5

## Urban fortifications

Thanks to Philip II and his successors, chiefly Alexander and Demetrius Poliorcetes, the development of poliorcetics, i.e., the art of besieging cities, rendered many defensive techniques outdated. But the walls of Macedonian cities, which are preserved in very good condition, particularly in their upper sections, do not allow any estimations regarding the corresponding development of the passive defense of cities. Although there are very few cities for which we are fully aware of the outline of their walls, we can conclude from the existing remains that Macedonian walls, like those of the Greek citystates, were adapted to the greatest possible extent to the terrain, in order to exploit to the maximum this defensive advantage. At Aegae, we find one of the rare cases where the upper city forms a genuine defensive refuge which is separated by an independent fortification from the walls of the city. In the same way, in cases of new cities with a regular city plan the outline of the walls determined by the configuration of the terrain was entirely independent of the internal residential organization. This is clear in Olynthus, as well as in the walls of Pella, although the latter's overall outline is not known. Only Dion gives the impression that the rectangular outline of its walls, whose first phase dates to the age of Cassander (ca. 300 BC ), was configured on the basis of its road network, with gates clearly aligned with the main road axes. The reason is that in this particular case the city was built on an essentially level site.

As regards defensive elements -towers at regular intervals, more frequently rectangular than round, the disposition of doors- and building techniques -normally a base of large limestone blocks with a wall of unbaked bricksthese did not differ at all from what we have long known about Greek military architecture. Nevertheless, two cities deserve mention for the particular features of their fortifications, which in any event predate their incorporation into the Macedonian kingdom. At Stagira (a colony of Andros and the birthplace of Aristotle), which had been built on two hills of a promontory in the eastern Chalcidice, excavations have recently uncovered part of the first wall, that of the archaic age, together with a gate. There are two fragments preserved from the gate's long lintel that are adorned with a low relief depicting a wild boar (the symbol on the city's coinage) facing a lion. To date, it is only from Thasos that we have evidence for passageways with relief decoration (a sanctuary entrance, the city gates).

Amphipolis was an Athenian colony near the mouth of the Strymon river which was conquered in 357 by Philip II and became of crucial importance for his kingdom. Its fortifications included a small inner enclosure wall ( 2.2 km ) encompassing only the urban center, and a large surrounding wall ( 7.5 km ) that protected the entire settlement. The latter presents in its northern section two noteworthy features dating to the period of the first state (5th c.). Along the Strymon, at the foot of the hillside, a unique system of tall, narrow drains has been created at the base of the wall. This system allowed flowing water to pass through the wall without flooding the city's inner surroundings. In the same part of the wall, the gate that opened on the river side led directly to a wooden bridge, in whose exceptional remains two phases may
be discerned. The earliest phase may be identified with the bridge mentioned by Thucydides ( 4.103 and 108) in his description of the battles between the Athenian Cleon and the Spartan Brasidas ( 422 BC ). The deck of the bridge was supported by a host of piles, mounted on the banks and in the river bed itself. These remains are unique in Greece.

## 3

Living quarters and their decoration: houses and palaces
3.1

Traditional houses and houses in the new cities
Although many sites in Macedonia have yielded examples of domestic architecture, excavations have rarely been extensive enough to offer us complete plans of entire building blocks or even residences. However, among such rare cases is Argilus, which is characterized by a type of three-room archaic house, with an arrangement we also meet elsewhere: a large transverse space leading to two small rooms forming a sort of mezzanine.

In the new cities of the classical age, the well-known type of Greek house with a pastas (stoa) prevailed; this had a nearly square ground plan and its rooms looked onto a small inner courtyard with one side covered. The most characteristic examples are found in olynthus, repeated in identical fashion in building blocks of ten houses each. The main house -with a small andron (symposium room), kitchen, bath, and bedrooms or women's quarters on the upper floor- looked by way of a transverse stoa onto a paved courtyard on the south, which in turn was surrounded by two auxiliary rooms. Houses of this type, built on lots with the same total area for all families ( $300 \mathrm{~m}^{2}$ ), initially expressed an egalitarian trend. However, the alterations observed in many of these -their division or in contrast, expansion at the expense of neighboring houses- attest to the reappearance of inequalities and the desire of the richest residents to acquire larger, if possible peristyle, courtyards. It was just this type of more spacious residence, like the so-called Villa of Good Fortune, that became generalized after the city's expansion outside its walls in the first half of the 4th century. The love of luxury was expressed during the same period with floor mosaics composed of river pebbles, placed in the andrones of around ten houses, which are among the oldest known examples from Greece. These costly floors, which were exclusively worked in black and white and which were most probably imitations of woven carpets, carried representations of floral motifs or multi-figure scenes, framed by bands with varying orientation to be visible to the banqueters who would have been reclining on couches (anaklintra) along the room's four walls. The mosaics have depictions inter alia of Bellerophon slaying the Chimaera, griffins dismembering deer, sea-horses, and Nereids.

## 3.2 <br> The aristocratic houses of Pella

We also know of mid-sized houses with a pastas from Pella. But here, the enormous aristocratic houses that came to light in the 1950s in residential quarters south of the agora are more noteworthy. They were so large -between 2000 and $3000 \mathrm{~m}^{2}$ - that there were no more than two or three per block. They all featured a Doric or Ionic peristyle courtyard, around which rooms were disposed in four wings. The main wing, which had an upper floor, was on the northern side and looked south. It gathered together the reception areas, particularly the large banquet halls and living rooms. The south wing was intended for utilitarian spaces. The luxury of these houses, which date to the final quarter of the 4th century, is expressed both in their floors and in their wall
revetments, attesting to increased wealth in the capital shortly after the age of Alexander.

The houses that have been excavated, particularly those of Dionysus with its two peristyle courtyards (Doric on the south, Ionic on the north) and the House of the Abduction of Helen have yielded in all more than ten pebble mosaics. The vestibules of the banquet rooms were decorated with mosaics featuring geometric motifs, like the inscribed squares or checkerboards of lozenges which were imitations of costly floors with marble inlays (opus sectile). In the andrones themselves, the mosaics depicted both the central motif of the room as well as on the threshold of the entrance scenes with living figures, from which the houses' conventional modern-day names come. The subjects were inspired both by mythology, including the abduction of Helen, an Amazonomachy and a female Centaur pouring a libation, as well as the world of Dionysus, like the scene with the god mounted on a leaping panther, as well as from the world of the (royal, most likely) hunt, like a scene from a deer hunt signed by Gnosis, and a depiction of a lion-hunt that may reflect the famous episode in which Craterus saved Alexander's life. Finally, other scenes have commonplace subjects, like animal fights featuring griffins (already known from Olynthus) or compositions with rich floral decoration. All these mosaics were adapted to the point of view of those who would have seen them upon entering the room.

The pictorial representations are characterized by a genuine painterly style, which is expressed both in bold composition -frequently pyramidalwith the placement of successive planes in the background and a perspective presentation of bodies, as well as skilful employment of colors. This latter is discreet, but with fine gradations for rendering masses and shading. It is obvious that the mosaicists were inspired by large-scale painting. From a technical standpoint, they play with various sizes of pebbles, have resort to man-made or semi-precious materials to depict shades of green and blue and perhaps the eyes of figures, and finally, employ thin clay or lead bands as graphic elements to more precisely define outlines and details.

As regards the walls, the construction technique that employed unbaked bricks atop a stone base required that they be coated in plaster to give the impression of a more expensive material. Preserved examples like those in Pella and Amphipolis are rare, precisely because of the fragility of the materials. They are sufficient, however, for us to identify the use of painters' means that imitate carefully-finished stone constructions, suggesting even colorful marbles. This is a "structural/masonry style" that doubtless was the Macedonian harbinger of the First Pompeian style. The House of the Wall Plasters in Pella testifies to the invention of another wall painting technique. The high walls ( 5 m ) of an enormous exedra have decoration on two levels. In the lower section, the toichobate stones are painted in the "structural/masonry style", while the upper wall features a painterly depiction with the blue of the skies depicted between pilasters, in an illusionist technique that makes the room seem larger than it is.

## 3.3

## Macedonian palaces

Royalty implies palaces, an architectural type that was unknown in the rest of Greece in the classical age. The Macedonian monarchy built at both of its successive capitals, Aegae and Pella, royal residences that are more representative of palace architecture when compared to palaces in other royal capitals in the Greek world like that at Pergamum, which was confined by its cramped site on the acropolis, or the palace of Alexandria, which is known only from literary sources.
3.3.1

Aegae
In the ancient capital of the Macedonian kings, Aegae (Vergina), the palace occupied a remarkable locale among the foothills of the Pierian Mountains, from which it dominated the plain and the Haliacmon valley to the north. It was partially excavated by Léon Heuzey in 1861, and throughout the 20th century it was an object of many research missions which repositioned it within its ancient context. In the western part of the city, the palace, together with the adjacent theater, agora, sanctuary of Artemis Eucleia, and other public monuments, formed the political center of Aegae.

The plan transferred into unprecedented dimensions ( $104.5 \times 88.70 \mathrm{~m}$ and a total area of $9.250 \mathrm{~m}^{2}$ ) the principles of the Greek house, with rooms arrayed around a peristyle courtyard. This particular courtyard, measuring $44 \times 44 \mathrm{~m}$, was surrounded by a simple Doric colonnade. The south stoa ensured access to the four andrones (banquet halls) in the south, and most likely more official, wing, which had a room at each end, while the other two in the middle shared a large common vestibule. In the east wing, which was unquestionably the on-
to the worship of Hercules Patroos, the mythical ancestor of the royal house of Macedonia. In the west wing, three enormous rooms (ca. $300 \mathrm{~m}^{2}$ ) and a roof without internal column supports -a true carpenters' feat- hosted symposia.

However, according to all the proposed reconstructions, what distinguished this palace from the organization of a simple house was the treatment of its exterior facades, which were visible from the city on the north and east, as well as the grandeur of its entrance. The north wing extended to the outer side with a balcony, which was built atop a retaining wall (height 6 m ) and which was probably covered with a peristyle. The presence of Doric porti$\cos$ in front of the east wing on either side of the entrance is certain. The propylon proper (length 10 m ) with an Ionic façade on its upper floor, led to the interior stoa via three successive rooms separated by triple doors.

Beyond the apparent modesty of the materials used for the walls, which were made of unbaked bricks set atop a limestone base, the luxury of the construction is expressed in a variety of ways, including the quality of plaster on the walls, which were adorned with solid colors but certainly with painted compositions of living figures as well, the enormous marble thresholds of the monumental doors, the precision of the cutting and carving of building materials that gave the palace at Aegae its characterization as the "Parthenon of Northern Greece", and finally, the floors in the various rooms, which feature opus sectile or pebble mosaic floors. The best-preserved mosaic, in an andron in the south wing, presents an exceptional circular floral composition surrounded by a maeander and posts, while the corners of the composition depict female figures with bodies ending in inverted lotus flowers from which tendrils emerge.

Today researchers accept a date for this building in the third quarter of the 4th century. As regards the much less-carefully constructed house annexed to the western part of the palace, which included rooms on both sides of a peristyle courtyard, this is considered either a complex of ancillary spaces annexed to the palace, or a building that replaced the palace after its first destruction, undoubtedly by an earthquake.
3.3.2

Pella
Of the three hills surrounding Pella on the north, the palace occupies the middle one. It is adjacent to the wall and thus overlooks the city, fully incorporated
into its plan (see above 2.2), and further in the distance, the Thermaic Gulf. This was a complex of impressive size (estimated area ca. $60,000 \mathrm{~m}^{2}$ ) and complexity, which required enormous earthworks. However, both its poor state of conservation -given that the removal of building materials from the late 14th century destroyed most sections down to foundation-level- as well as the incomplete excavations still leave many unanswered questions concerning the placement and function of various rooms.

The plan deploys antithetically at least six complexes of rooms arranged around peristyle courtyards, organized in two series. Of the three southern complexes, at least two present a common front towards the city in the form of a stoa with columns set on a crepis (height 2 m ). The Doric colonnade (length 154 m ) was interrupted by a superb monumental propylon whose façade (length 15 m ) combined the Ionic order of the upper story with four Doric columns on the ground level. Structured in three parts, this propylon led directly to the southeast complex, which appears to have been the official/formal part of the palace, arrayed around a peristyle courtyard $(35 \times 30 \mathrm{~m})$ with an altar at its center. Apses were formed at the ends of the north stoa, and the north wing included an enormous oblong room ( $22 \times 12 \mathrm{~m}$ and a restored height of 12 m ), whose walls were structured in accordance with an Ionic style in two levels. The smaller rooms in the northeast part of the complex above may have been living rooms, perhaps those of the personnel. The central section included two courtyards (width of sides 50 m ) with Doric peristyles; all the groups of rooms were on their north side. The huge pool $(7 \times 5 \mathrm{~m})$ northeast of the north courtyard designates this central section as the palace's palaestra. As regards the west section, the two enormous complexes that composed it remained unfinished, retaining the ambitious form of their original conception, and we can only surmise that it included gardens on the southwest and barracks on the northwest. The palace's construction encompassed the entire 4th and part of the 3rd century.

### 3.3.3

## Palace architecture

Despite their differences in dimensions and complexity, these two exceptional examples of palace architecture share some features, including their scale of composition, the means by which their splendid facades were incorporated perfectly into the landscape, dominating the city from their prominent setting, and finally their organization on terraces separated and highlighted by parts of the whole. These were characteristic features of Hellenistic architecture, whose provenance is often attributed to Pergamum. If however the early dating for the palaces at Aegae and Pella are confirmed -with the first phase of the former dating to the period of Archelaus, and its full development to the reign of Philip II- then this tendency to create an architecture of prestige as a symbol of royal power could very well be a Macedonian invention. The two palaces also share the same architectural vocabulary, such as engaged semi-columns on either side by pilasters.

There remains the problem of the function of these palaces, which continues to be a subject of dispute. While it is evident that the palace at Pella simultaneously housed all of the administrative and political mechanism as well as court life, we may surmise that the palace at Aegae served the needs of the latter exclusively, within a framework of seasonal and festive occupations, without however being obliged to accept restorations that identify nearly all its rooms as banquet halls.

## 4

Artistic and artisanal production
From the mid-4th century and the reign of Philip II there began to be some apparent differentiation of workshops in the Macedonian kingdom from those of the Greek city-states, which had a long-standing presence in Macedonia.

Workshops can be approached initially through their production, known both from portable as well as non-portable finds, works of art or objects of daily use, in settings of every sort - sanctuaries and public areas, houses and, above all, cemeteries. We know of original Macedonian products from the late archaic period such as silvered pottery or amphoras with sub-geometric ornament, whose place of production remains a matter of discussion. During the archaic and much of the classical age, artistic and artisanal production depended to a large extent on the techniques and models imported from major centers of Greece in the wider sense. When not imitating these directly, the local products of the Greek city-states of Macedonia and the center of the Macedonian kingdom were greatly influenced by them, though without always competing with their high quality. This is particularly the case for ceramic wares -pottery and figurines- and sculpture, which were influenced by Ionia, Attica, and Thasos, while metal-working and silver- and goldsmithing were characterized by greater originality.

The phenomenal growth in the power of Macedonia owed to Philip II altered this situation, providing an impetus to a genuine court art. Workshops responded to the needs of the royal house and aristocracy by following new paths, made feasible thanks to the wealth of donors, and limited by or benefiting from the raw materials available. Although it did not possess marble, Macedonia was rich in construction timber and precious metals, thanks to the mines in the Pangaion which have recently drawn the interest of researchers. At the same time, Macedonian architecture began from that time onward to distinguish itself as regards building types (palaces, aristocratic houses, tombs), a complex stylistic vocabulary, and decoration. Macedonians invited distinguished artists to the court, including the painters Zeuxis and Apelles and the sculptors Lysippus and Leochares. In painting, these personalities favored the appearance of original movements developed by Macedonian artists, and they inspired many technical innovations into the mosaicists. The repertoire of silver- and goldsmiths was enriched by Macedonian motifs such as the Hercules knot, the symbol of the Argeadae, and especially by eastern motifs, which became known following Alexander's conquests. Ivory-carving and glassmaking in turn produced luxury works of miniature sculpture and tableware. Semi-precious materials frequently adorned compositions on furniture, sarcophagi, and luxurious couches (klines), attesting to the high level of quality Macedonian artisans had acquired. While Macedonian workshops, as regards production of large and small-scale sculpture, belong to an enormous Hellenistic koine, in the field of ceramics they acquired from the late 4th century an autonomy expressed by original works such as the vases decorated in the so-called "West Slope" style or cups (skyphoi) with relief figures produced in Pella and its satellite workshops.

However, as places of work and production, workshops are not easily identified at archaeological sites. When they are not confused with construction sites, they are recognizable thanks to the presence of particular facilities or specific technical installations (kilns, presses) as well as by portable finds such as defective products and rejects (wasters), production tools (molds), or even stored materials. We should also point out that our perception of artisanal
activities in the Macedonian area comes, as elsewhere, from excavations, which are in no way exhaustive, and that some networks and fields of production have not left identifiable remains.

Some general characteristics can be drawn from this still incomplete picture, though they cannot be viewed as certainties. Apart from the processing of agricultural raw products to produce wine and olive oil, workshops were almost exclusively urban. In Greek city-states (Olynthus, Argilus) and the cities of Macedonia (Petres, Beroea, Aegae, Euia [mod. Polymylos]) there were no "artisans' quarters". Even if there were groupings, workshops were generally scattered over the urban area -in residential quarters, near public squaresor the suburban area, which they shared with cemeteries. Public authorities were not interested in the creation of workshops, which were installed wherever they were permitted so long as they did not impede some more ambitious urban project. Normally, they were simple production units nearly always connected to a point of sale, and thus they belong to the category of small-scale private enterprises. To date there is no evidence for large-scale production facilities beyond some concentrations of installations, such as the groups of kilns in Euia.

The agora of the capital Pella was a notable exception. Its agora was a huge complex still at the excavation stage, which corresponded to ten building blocks in the regular residential city plan $(262 \times 238 \mathrm{~m})$. The complex was dedicated to artisanal and commercial activities conducted in what were doubtless local rental units, workshops-shops with two adjacent rooms, frequently equipped with a well and protected under stoas, and with access to either the main road or one of the peripheral roads. In the units of the eastern wing, mold-made clay products, vases, and terracotta figurines were made and sold, since quantities of molds, relief vases, and figurines have been found there. In the units of the western wing, fragrances, figurines, metal objects, and jewelry were made. The southern wing was devoted to commerce in liquid and solid foodstuffs. The peristyle building in the southwest corner of the agora and its northern wing housed the administration of this economic center of both the capital and the kingdom. The Pella agora thus comprised an exceptional case where the public authorities had organized artisanal production and commerce and facilitated its spatial concentration, following the promptings of Aristotle: "The agora for merchandise must be different from the free agora, and in another place; it must have a site convenient for the collection there of all the goods sent from the seaport and from the country" (Politics 12.6 [1331b]). There remains a question concerning the total absence of kilns contemporary with the agora and under its control, a phenomenon that may perhaps be connected with the presence of many other pottery and metalworking workshops, which were equipped with a system of kilns and found in two other building blocks, one to the north and the other to the south of the agora.

## 5.

The world of the dead
As elsewhere in Greece, the graves of ordinary people were in most cases extremely simple, distinguished by a stele that often carried reliefs or painted living figures such as at Aegae. Macedonia has yielded a host of similar monuments, some of which were of high quality. The element that characterizes this particular region is the more grandiose tombs of the members of the elite, which were not customary in the rest of Greece.
5.1

Monumental cist (chamber) tombs
Cist (chamber) tombs were regular underground square chambers of varying dimensions, built with large stones and covered with a flat roof made of large slabs, supported by stone beams where this was required by the tomb's dimensions. They did not have a door, since they were accessible only through their roof before they were permanently sealed shut. The largest such tombs contained an antechamber before the main chamber, and adopted special means of roofing. This monumental type, which appears to have been the par excellence sort of tomb for the elite in the archaic and classical ages, is fairly widespread in Macedonia.

In the archaic and classical cemetery of Livadia in Aiane, twelve monumental, perhaps royal, tombs have come to light. Some of these were surrounded by an enclosure wall. The largest (tomb A ) included a chamber ( $4 \times 4 \mathrm{~m}$ ) with a roof probably supported by a column and wooden beams. The architectural finds allow us to restore with certainty above the chamber a Doric naïskos with funerary function.

At Aegae, the cist tomb of Palatitsia (ca. 350 BC ) presents two internal support columns and a roof composed of two rows of large monoliths; it was also covered by a mound (tumulus). But it was in the great toumba of Vergina, an enormous tumulus with a diameter of 110 m and a height of 12-13 m , that the most spectacular cist tomb was uncovered. By virtue of the main theme of its painted decoration, it is called the "Tomb of Persephone". Three walls of the large mortuary chamber $(3.5 \times 2.10 \mathrm{~m}$, height 3 m$)$ include a red lower zone, a narrow band with opposing griffins on either side of a flower on a blue background, and in the upper section an impressive composition rendered on a white background. On one wall, a bearded and disheveled Pluton is rushing onto his chariot, lifting in his powerful grip Persephone, who extends her arms towards her follower in despair, while Hermes goes on before the chariot. On the adjacent wall, there is a depiction of a seated mourning Demeter, and on the opposite wall are the three Fates who were present at the scene. The brushstrokes of the preliminary draft reveal direct improvisation, while the skill in the rendering of perspective, movement, and the distribution of colors is worthy of a great artist, Nikomachus according to one hypothesis. Regardless of the painter's identity, the tomb is dated to ca. 340 BC exclusively on the basis of stylistic criteria, since its looting has left no traces of the portable grave goods that must have been grouped together on shelves above the fourth wall.

The six monumental cist tombs revealed after 1962 at Derveni near Thessaloniki, however, yielded exceptional portable finds, for the most part bronze and silver vases and symposium utensils, gold wreaths and diadems, and bronze and iron weapons. In the largest tomb B (ca. $3 \times 2 \mathrm{~m}$ ), which is dated to ca. 330, were discovered both the carbonized remains of one of the very few papyri that have been found in Greece, which contained an Orphic text that has been much commented upon (see p. 121, this volume) as well as a masterpiece of Macedonian toreutics, the famous Derveni Crater. This monumental vase, made of a copper-tin alloy, with a height of 76.6 m (excluding its volute handles) contained the charred bones of the deceased. It is entirely covered with relief decoration inspired by the worship of Dionysus. Apart from the main scene on the belly of the vase, which represents Dionysus and Ariadne surrounded by dancing satyrs and maenads, the base and neck were decorated with reliefs and decorative bands. In the center of the volutes on
the handles are male busts, and four seated statuettes sculpted in the round (Dionysus, a Silenus, and two maenads) were added on the shoulder.

Less grandiose but equally interesting is the cist tomb II of tumulus A at Aineia (mod. Nea Michaniona), from the second half of the 4 th century. The paintings on its four walls reproduce the interior of a gynaikonitis (women's quarters). Above a zone with female heads connected by a floral scroll, domestic birds in vivid colors, female busts hanging along the wall, and other characteristic objects belonging to the world of women are depicted.

The Tomb of the Philosophers in Pella (ca. 300 BC) draws its name from the painting of six "philosophers" or intellectuals on the inner walls of its very large mortuary chamber $(4 \times 2 \mathrm{~m})$. This is a unique subject in funerary painting, though it was widespread in the Roman era. On the basis of our existing knowledge, these particular representations are the closest links connecting us with the classical prototypes of images of the intellectuals. This may have been the tomb of a wise man -perhaps of the astronomer pictured on the tomb's west wall- or of some patron of letters. In any case, beyond their intrinsic interest as works by a great artist, these representations attest to the vitality of intellectual life in the kingdom's capital.

## 5.2

## Macedonian tombs: general overview

Beyond some experimentation, the quest for monumentality by cist tomb architecture in the end was confronted by their roofing problem. Although Greek architecture avoided the vault for a long time, in these underground constructions its use was imposed as the only solution capable of withstanding the weight of the fill above a large funerary chamber.

From this natural evolution of the cist tomb there derived the so-called Macedonian tomb, a special architectural phenomenon fully harmonized with its own place and time which constituted Macedonia's best-known archaeological innovation. The Macedonian tomb was an underground building constructed of large limestone blocks that included a funerary chamber and often an antechamber, and which was roofed by a vault. This type of roofing allowed entrance into the chamber through a double marble door incorporated into the façade, which had a more or less monumental form with engaged Doric or Ionic colonnades, and an entablature surmounted by an attic or pediment which had no architectural relation to the rest of the construction. In some cases a passage (dromos) led to the tomb. The entire burial was covered by a tumulus, atop which a sacred grove was planted, as mentioned by Plato (Laws 947d-e). This type of funerary monument was obviously intended only for the military, aristocratic, or the princely elite.

The more than one hundred tombs belonging to this category are found chiefly in central Macedonia. Most are at Aegae -where the Macedonian princes continued to be buried even after the transfer of the capital to Pella-, Mieza (Lefkadia, Naousa), and Agios Athanasios, while there are isolated examples of such monuments at Pella, Dion, and Amphipolis. Outside the borders of ancient Macedonia, there are no more than ten known tombs of this type; these are found primarily in southern Greece and Asia Minor. The dating of these monuments is a priori difficult, since their various forms -none is identical to any other- do not fall in a linear progression, and looting has almost completely denuded them of the portable funerary gifts that comprise the most secure evidence for dating. However, they all fall within a limited chronological time-frame, with the earliest being placed shortly after the mid-4th century, the largest and most important between the late 4th century and the mid-3rd, and the latest to the mid-2nd century.

Like the cist tombs, the richest Macedonian tombs had painted decoration both on the interior of the funerary chamber in the form of complete paintings or zones as well as on their façade, where there was abundant space in the intercolumniations, the entablature-Doric metopes and Ionic friezespediments, and crowning elements. We find scenes of still life in zones with weapons and garlands, repeated themes of battles or chariots, isolated personages as well as some exceptional compositions, a number of which are attributed to major painters of the second half of the 4 th century known from literary sources.

Since there is very little information on funerary customs and practices connected with the Macedonian tombs, we can only point out some major characteristics. In the burial chamber there was nearly always a couch (kline) or a stone imitation of a couch, but thrones were rarer. Doubtless we should admit that the former characterized the male burials, and the latter the female ones, as is specifically confirmed by a tomb in Eretria that included two couches with male names and two thrones with female names, as well as generally by Greek art, with its conventional depictions of the male as a symposiast and his wife on a throne in works that encompass the full range of large- and small-scale sculpture from the archaic period down to the funerary symposia of the Roman age. As in the other tombs, burial was employed among the Macedonians in parallel with cremation, in which case the pyre was near the tomb. The votive offerings that accompanied the dead-vases, weapons, jewellery, figurines- did not differ from those of other tombs except for their quantity and quality. Apart from a herôon in the great tumulus at Aegae, we have no other archaeological evidence for the worship of the deceased members of the Macedonian elite.

## 5.3 <br> Macedonian tombs: architectural and painting examples <br> 5.3.1 <br> The tombs at Aegae

Apart from their common features, some Macedonian tombs deserve special mention due to their architectural form or their grave goods. The earliest tomb of this type is the so-called Tomb of Eurydice from Aegae, which was discovered in 1987. It is an underground structure in the shape of an irregular parallelogram (ca. $10.7 \times 7.7$ to 7.9 m ), in which the vault is inscribed without reaching the exterior. This particular form was the product of a combination of the traditional type of cist tomb with a type of roofing which its builders doubtless did not yet fully control. The porous façade with double door is undecorated, and accompanied by a blind wall. In contrast, on the interior, on the wall at the rear of the spacious burial chamber ( $5.51 \times 4.48 \mathrm{~m}$, height 5.8 m ), the expected monumental façade projects like an optical illusion: four Ionic semi-columns, rendered in relief and painted marble stucco, frame a central door and two windows, supporting a colorful Ionic entablature with palmettes on a blue background. In front of this wall is a monumental marble throne (height 2 m ) with sculptured and above all, painted decoration. The back is actually a picture painted in the encaustic technique showing a frontal depiction of the chthonian divine couple Pluton and Persephone, triumphant on a four-horse chariot with galloping horses. A looted marble sarcophagus contained the ashes of the deceased woman, who was wrapped in a purple cloth and accompanied by precious objects. The fragments saved from the tomb's pillaging suggest a dating of ca. 340 BC . This may have been the tomb of Philip II's mother Eurydice, who died at about the age of seventy.

However, the best-known Macedonian tomb is that which was identified with the tomb of Philip II, following its discovery in 1977 on the western side of the great toumba at Aegae. The Doric façade (length 5.5 m ) was its most spectacular part, with a large door flanked by two columns set between pilasters, which support a full Doric entablature with architrave, triglyphs, and cornice. The whole complex is crowned by an exceptional painted frieze (height 1.1 m ) that depicts a hunting scene with seven hunters on foot, three riders, five or six wild animals (a lion, deer, a bear) and nine dogs in a landscape with trees, steles, and rocks. Towards the center of the composition, two riders -perhaps Philip and Alexander- are attacking a lion, while at the right edge the landscape of the rocks and caves from which a bear emerges undoubtedly recalls the megalithic solar observatory at Buzovgrad (in modern Bulgaria), symbolizing Scythia, where Philip had waged a victorious campaign. The skill in the rendering of perspective and in the composition reveals a great artist, a pioneer in landscape painting. The antechamber ( $4.5 \times 3.30 \mathrm{~m}$ ) and the square burial chamber (width of sides 4.5 m ), roofed with a circular vault (height 5.3 m ) concealed very rich portable finds that were uncovered exactly as they had been deposited at burial. In the burial chamber, a marble sarcophagus in front of the rear wall contained a gold larnax holding the cremated bones of the deceased wrapped in a purple cloth, on top of which had been placed a gold wreath of oak leaves. In front of the sarcophagus, atop a wooden kline decorated with ivory figures, all the deceased's armor (sword, dagger, iron and gold cuirass, greaves) had been placed, while a collection of silver, bronze, and clay utensils (craters and drinking vases, a spoon and ladle, a bronze pitcher) was set on a wooden table. Finally, in the corner of the chamber were an ivory shield and its bronze cover, other sets of greaves, a gilt silver diadem, and an iron helmet. The antechamber with its unusual dimensions actually housed another burial. Inside a second marble sarcophagus, another gold larnax with simpler decoration contained female bones wrapped in a gold and purple cloth, as well as a magnificent gold diadem. The other funerary gifts included a gold wreath of myrtle leaves, a gold quiver and its arrows, and the remains of a piece of wooden furniture with ivory decoration. Many architectural indications testify to the tomb's construction in two different periods, with the façade and more carefully-finished antechamber having later been added to the main chamber, which was clearly built in greater haste. These features, the exceptional richness of the portable finds -this is the only Macedonian tomb found containing a gold larnax- the dates of the various categories of funerary gifts, as well as the anthropological analysis itself all led excavator Manolis Andronikos to identify the tomb in question as that of Philip II, who was assassinated in 336 at Aegae, and who was hastily cremated by Alexander, who quickly needed to assume the reins of power at Pella. The dead woman in the female tomb was identified by Andronikos as Philip's last wife Cleopatra. The identification of the dead man with Philip, long a subject of discussion, is now tending to prevail over other proposed identifications.

In the great toumba at Aegae, the so-called Tomb of the Prince is adjacent to the previous tomb. It is slightly smaller, presenting a simple Doric façade without columns. Placed between corner pilasters, the marble door is flanked by two relief shields. There too the architrave above the entablature must have carried a large painting, though it would have been on some organic material (leather or a wood panel) which has left no traces. In contrast, the tomb is distinguished today chiefly for the painted frieze (height 24 cm ) in its antechamber, on whose four walls a chariot race unfolds with a notable variety both in the galloping of the horses as well as in its perspective. In the main chamber, a stone "table" had a circular depression for the placement of the
silver hydria containing the cremated bones of an ephebe, covered by a purple cloth. There was a gold wreath of oak leaves on the shoulder of the hydria. The portable funerary gifts -a wooden kline with ivory decoration, silver tableware, and weapons- confirm the royal descent of the youthful deceased, who may be identified as Alexander IV, who was assassinated by Cassander in 310.

One of the most beautiful Macedonian tombs, thanks to the elegance of its façade, is the Romaios Tomb, named after the excavator who brought it to light in 1938 near the so-called Tomb of Eurydice, with which it may be compared in many respects. Its large marble door belongs to a tetrastyle Ionic façade whose semi-columns are attached to pilasters. The bases of the columns, confined to a single torus, the architrave with only two bands, the narrow frieze -with a volute ornament, leaves, and white flowers on a blue groundand finally, the low pediment all contribute to the lightness of its proportions. A frieze with painted decoration identical to that on the façade, which however has been almost entirely lost, decorated the antechamber ( $4.56 \times 2.5 \mathrm{~m}$ ) and the square main chamber (width of sides 4.56 m ). In the same burial chamber, a built table and primarily a monumental marble throne decorated both with fins in the lower part) is no less impressive than the throne from the Tomb of Eurydice. Its looting in antiquity resulted in the disappearance of all the portable objects, so that the dating of the Romaios Tomb relies exclusively on architectural criteria, that place it ca. 300 BC .
5.3.2

The tombs of Mieza
Near Mieza (Lefkadia, Naousa) there steadily came to light from the 19th century until 2004 a group of eight monumental tombs, all found stripped of their portable funerary gifts. Although they are not the equals of the royal tombs at Aegae, the architecture or decoration of a number of them are of comparable interest. The most noteworthy tomb, which was uncovered in 1954, was, on the basis of its dimensions, named the Great Tomb or Tomb of Judgment from the main subject of the figural decoration on its façade. The nearly square funerary chamber ( $4.82 \times 4.90 \mathrm{~m}$, height 5.26 m ) has painted decoration of marble stucco which depicts a tall toichobate above which rise Ionic pilasters with an architrave, resulting in the whole giving the impression of a room surrounded by a peristyle. The oblong antechamber is not very deep, but it is much larger and higher than the burial chamber itself ( $6.50 \times 2.12 \mathrm{~m}$, height 7.70 m ) because it supports a two-level monumental façade of nearly equal length and height ( $8.68 \times 8.60 \mathrm{~m}$ ). The lower Doric level includes four semi-columns between corner pilaster and a Doric frieze whose eleven metopes are decorated with a painted scene of a Centauromachy, while the front of the projecting cornice featured a band with floral motifs on a blue background. The upper level is Ionic: on a base decorated with a battle of Greeks (or Macedonians) and barbarians (or Persians), which is done in plaster relief, rise six semi-columns between corner pilasters, supporting an Ionic entablature (two-zone architrave, dentil band) surmounted by a pediment. As regards the pedimental decoration, we know only that its technique was identical to that of the base. The intercolumniations of both levels are painted, depicting closed false windows on the upper floor, and on the lower one presenting panels/screen walls surmounted by independent personages linked by the common theme of the descent to Hades. These panels comprise the main figural decoration of the façade. To the left of the door are depicted the deceased as a Macedonian officer ready to depart and the psychopomp Hermes, leading the dead to the Underworld. To the right of the door are depicted chthonian deities identified by
inscriptions: a seated Aeacus and Rhadamanthys leaning on his staff, awaiting the deceased in order to judge his soul. Despite the relative lack of originality, the two painters to whom these scenes are attributed demonstrate high technical expertise. This tomb is dated to the late 4th century.

The elegant tetrastyle Ionic façade of the slightly-later Tomb of the Palmettes recalls that of the Romaios Tomb. This tomb owes its name to the polychrome floral decoration covering the rear of its narrow antechamber: a unique composition with three large palmettes, lotus blossoms and water flowers on a blue background, which evokes an Underworld landscape. These floral motifs are repeated on the façade, both on the architrave's bands and the sima as well as on the large acroteria. The painting on the pediment portrays a man and a woman (Hades and Persephone?) reclining and facing each other, as on symposium couches (anaklintra).

The Kinch Tomb with its simple Doric façade without columns owes its name to the Danish archaeologist who studied it in the late 19th century, preserving information on the painted decoration of the background in the burial chamber, which today has been completely lost. It depicted a Macedonian horseman attacking a Persian soldier. This was certainly the tomb of an officer from the first half of the 3rd century.

The Tomb of Lyson and Callicles, two brothers who are named (a rare occurrence) in a painted inscription on the lintel over the tomb's door, is one of the smallest Macedonian tombs $(3.92 \times 3.05 \mathrm{~m})$, and is unique in many respects. It includes a tiny antechamber with a flat roof that projected towards the main chamber. The latter is decorated with trompe l'oeil painted pilasters joined by a floral garland adorned with ribbons. The lunettes defined by the vault on the chamber's narrow sides are taken up by representations of cuirasses, helmets, greaves, and swords. Between the painted pilasters are twenty-two niches, seventeen with inscriptions, which had received the ashes of four generations of deceased belonging to the same family. This is the latest tomb in Mieza; it was built around the end of the 3rd century and remained in use until the Roman conquest.
5.3.3

Agios Athanasios
The cemetery beneath the toumba of Agios Athanasios, whose ancient name remains in doubt, lies about 20 km west of Thessaloniki. It has yielded many rich Macedonian tombs. Tomb II, uncovered in 1994, is one of the cemetery's exceptional monuments. Its single square chamber (width of sides 3 m ) includes the usual decoration in zones. In contrast, the painted decoration on the Doric façade is of greater interest. On either side of the door and beneath two large shields, two youths wrapped in cloaks (chlamydes) guard the tomb entrance. However, mainly below the architrave and between pilasters, there is a symposium scene on a long Ionic frieze featuring twenty-five people. At the center of the composition, the symposiasts surround the host (unquestionably the deceased). To the right, the torch-lit arrival of a small group of mounted guests is depicted, and to the left another group of Macedonian military can be made out. From the looted portable votives, the very few remains permitted the identification of a luxurious kline and armor. This was probably the tomb of a high-ranking military officer from the last quarter of the 4th century.

## 5.4

Rock-cut tombs
From the late 4 th to the late 2nd century, tombs with a large vaulted chamber that were hewn directly into rocks, with an access corridor, are frequently
found in many regions of Macedonia where there was suitable soft limestone subsoil. Such cases concern primarily the environs of Pella, Mieza, and Veroia, where dozens of rock-cut tombs have come to light, some of them composed of two adjoining identical chambers. But the most impressive monument was recently discovered in Pella. It was a complex that covered an area of $63 \mathrm{~m}^{2}$, with seven underground chambers with vaulted roof and painted walls, distributed around a space accessed by a long dromos. The complex was in use from the early 3 rd to the second half of the 2nd century. Rock-cut tombs are a common type in the eastern Mediterranean, which places Macedonia in the interplay of influences and exchanges in the region during antiquity. However, some of these particular tombs in Macedonia are distinguished by virtue of their architectural façade, a peculiarity that is undoubtedly owed to the influence of the Macedonian tomb type.

## 6

Conclusion
From this necessarily incomplete overview we derive at the same time the sense of familiarity, of difference, and of the originality of Macedonian monuments. "Familiarity", because all these monuments were Greek; in their forms and manifestations -from city planning and residences, sanctuaries and tombs to material production in general- in the customs, the way of life and beliefs that could be connected with these monuments, and in religious practices and burial customs, we find once again the fundamental elements of Greek civilization that classical archaeology had long brought to light as regards the world of the city-states.
"Difference", because in Macedonia we encounter elements wholly unknown in the Greece of the city-states, including palaces, monumental tombs, and court art, which are connected with a particular politico-economic structure, namely that of royalty. This "other" Greece is therefore a royal Greece, one dominated by an extremely wealthy class, in contrast to the Greece of the city-states. Nevertheless, this difference is always translated into a language with exclusively Greek types, indeed a language characterized by an amazing coherence, since the architecture of the facades on the palaces and Macedonian tombs is essentially identical, as is the wall decoration of palaces, aristocratic residences, and monumental tombs.

Finally, "originality", because it is becoming ever more obvious as we acquire more exact dates that 4th century Macedonia not only received Greek types, but contributed decisively to their development in most fields.Research now attributes to Macedonia inventions that had previously been attributed to other kingdoms or regions of the ancient world, such as the construction of large residential complexes articulated in terraces, spacious peristyle public spaces, complex architectural types, the "structural/masonry style" in the decoration of houses, and the pictorial style in mosaics. Furthermore, in some cases such as large-scale painting, Macedonia is the only place where these forms are preserved. Ongoing research and future discoveries will doubtless confirm the position -familiar, different, and original- which Macedonia has recently acquired in the study of Greek civilization.

## Translation D. Kazazis

# Languages and dialects in Ancient Macedon 

1
Introduction ${ }^{1}$

1 I am grateful to Georgios Giannakis and to Julián Méndez Dosuna for comments and corrections to previous drafts.

2 The so called Temenidae or Argeadae were the three brothers descendants of Temenus, who came from Argos and arrived to Lebaea in Upper Macedonia, whence they first conquered the region of Beroea and Aegae (mod. Vergina), their future capital, and then the rest of Low Macedonia (see Herodotus 8.137-9). Argos, in this context, probably refers to the Argos Oresticon in the region of Orestis on the west face of the Pindus mountains.

3 The text of most tombstones from Vergina is painted.

4 Hatzopoulos (1996, vol. 2, 15-8) distinguishes the following types of public documents: treaties, royal letters, grants and dedications, and decrees and laws of the cities. Private inscriptions fall in funerary documents, catalogues, dedications, and deeds of sale.

5 See Tsantsanoglou, Parassoglou \& Kouremenos 2006; Bernabé 2004 and 2005.

The present chapter gives an overview of the languages and dialects directly or indirectly attested in the ancient kingdom of Macedon from the first documentary evidence in the 5th century BC to the end of the 4 th century BC . Most documents come from the 4 th century $B C$, while only a few are relevant to giving a final answer to what at a time was the contentious issue of the nature of the Macedonian speech before the reign of Philip II (360/59-338 BC).

During the last decades of the 20th century, archaeological research in the ancient kingdom of the Temenidae made great advances. ${ }^{2}$ Many archaeological sites were excavated or explored and many documents were found and published (see Hatzopoulos 2006, 16f.). Among other things, such discoveries and investigations settled the bitter question of the ancient Macedonian language almost in a definitive manner. A further consequence of such advances is that we have gained a new insight into the history of the Macedonian kingdom before Hellenistic times (see Roisman \& Worthington 2010).

In the absence of new documents of equal significance to that of the curse tablet found in Pella in 1986 (see Appendix, p. 287), I will limit myself to listing the Greek dialects attested in the ancient kingdom of Macedon before the emergence of the Attic-Ionic koine and to drawing a fine-grained description of the Macedonian Greek dialect, elaborating on studies carried out by Brixhe, Dubois, Hatzopoulos, Masson, and Panayotou, among others.

## 2

The nature of the evidence
Depending on the material used for writing and on the way the texts have come down to us, the documentary evidence concerned with the languages and dialects spoken in the ancient kingdom of Macedon falls into two categories. A first group consists of monetary legends and of epigraphic documents carved or painted on stone, ${ }^{3}$ scratched on sheets of lead, or engraved on gold lamellae or on other materials. They date from the 5th century BC onwards and have come down to us in a direct manner. Inscriptions on stone have a public or a private content, but most of the other materials bear private documents. ${ }^{4}$ The so called Derveni papyrus, which was found within a funerary monument close to Thessaloniki and which contains a philosophical treatise in the form of an allegorical commentary to an Orphic poem that related the birth of the gods, belongs to this group by its date (mid 4th c. BC) and by the place of the discovery. ${ }^{5}$

The second group has been transmitted through medieval manuscripts and can be divided into three classes. They consist of notices given by ancient
literary authors about the speech of the ancient Macedonians, of around 140 glosses explicitly attributed to the Macedonians by ancient lexicographers and particularly by the lexicon compiled and attributed to Hesychius, and of mythological, personal and place names quoted by literary authors. ${ }^{6}$

## 3

## Two outstanding features

The most prominent feature of the linguistic situation in Macedonia during the period under consideration is that all the surviving evidence, from sepulchral monuments to public inscriptions, is written in Greek, regardless of whatever may be meant by the stray allusions to the spoken Macedonian (see 9.4 below) and independently of the interpretation of a number of glosses which apparently are not understandable as Greek.

A second remarkable feature is that the documents found in the ancient kingdom of Macedon display a high dialectal diversity, ranging from NorthWest Ionic in the Euboean colonies (Olynthus, Torone, Dicaea, Mende, Meth-
islands (Acanthus, Stagira, Ennea Hodoi, Scione), Attic in the cities that were members of the Delic-Attic league (Methone, Heracleion, Aphytis, and so on ${ }^{8}$ ), Corinthian (Potidaea), and to the Attic-Ionic koine. The Derveni papyrus is written in Ionic with an Attic overlay. While the Greek political centers situated to the south of Macedon have a relative dialectal uniformity, only threatened by the emergence of the koine, the political area of Macedon lacks dialectal uniformity already before the early influence of the Attic-Ionic koine all over the country.

## 4

## The Macedonian dialect of Greek

Until 1986 Macedonian could rightly be called a Restsprache, a language poorly documented. ${ }^{9}$ Although a great number of inscriptions had been found in many places of the ancient Macedonian state and an intense work of edition had been carried out in the previous decades, the documents that could be dated before 400 BC contain only brief texts, most of which have been carved, engraved, scratched, or painted on pots or on easily transported objects, which could have been brought to Macedon from some other place. For this reason, there was a widely spread view that there did not exist proper Macedonian documents of an early date but only texts brought there from somewhere else. One among many examples is a ring found in Chalastra (Mygdonia) but coming from Sindos that bears the inscription $\delta \tilde{\omega} \rho o v$ (SEG 31. 649, ca. 480 BC).

The majority of the epigraphic documents found in the ancient kingdom of Macedon can be dated from the beginning of the 4th century BC onwards and are written in the Attic-Ionic koine or are strongly influenced by it. ${ }^{10}$ Since this variety of Greek came into being not earlier than the 5th century BC and the Macedonians settled in the eastern part of the mountains of Olympus in the 8th or 7th century BC (see fn. 2), it is obvious that the Attic-Ionic koine cannot have been the original speech of the Macedonian kingdom.

Under such circumstances, researchers had to rely on ancient sources in order to find out clues about the original Macedonian speech (see Babiniotis 1992). ${ }^{11}$ Nevertheless, the account given by the ancient sources is contradictory and controversial. According to Herodotus (5.22, 8.137-9), the Macedonian kings were Greeks. ${ }^{12}$ But insofar as Macedonians are listed by Thucydides (2.80.5-7, 2.81.6, 4.124.1) and Aristotle (Politics 1324b) among other barbarian peoples, the king would have reigned over a non-Greek population. Isocrates (Philip 108 and 154), in a speech intended to persuade Philip to take

6 A number of glosses given by Hesychius with or without their origin may be taken from Amerias, a Macedonian lexicographer who compiled a glossary in the 3rd century BC.

7 Amphipolis was founded by the Athenians in 437 BC , but most citizens were not Athenians (see Thucydides 4.106.1).

8 For a list of members of the Delian League see Hansen \& Nielsen 2004, 1356 f.

9 Still in 1999 Der Neue Pauly, s.v. "Makedonisch", calls Macedonian a Trümmersprache. More precisely, the English version says that Macedonian "only survives in small fragments".

10 See Brixhe \& Panayotou 1988. Distinctive koine features appear in the most ancient inscriptions found in Macedon; see Hatzopoulos 1996, vol. 2, no 5 (Oleveni, June 345): $\tau \alpha \tilde{\tau} \tau \alpha$, عiऽ, हैtovৎ, $\beta \alpha \sigma \iota \lambda \varepsilon ́ \omega \varsigma ;$ no 6 (Philippi, 330): $\mu \eta \theta \varepsilon ́ v \alpha$,
 $\varepsilon ँ \lambda \eta$. Koine was adopted by the Macedonian kings as their official vehicle of communication, as inferred from the dialect of inscriptions set up abroad from mid-4th century BC; e.g., IG 12.2.526 (Eresus, 336 and after) in Aeolic of Asia Minor, but the responses of Philip II and of Antigonus in koine (see Rhodes \& Osborne 2003, no 83); I. Priene 156 (Priene, 334 and after) with the dedication by Alexander of the temple ( $v \alpha o ́ v$ ) to Athena ('AOqvaínı in Ionic) Polias (see Rhodes \& Osborne op. cit., no 86). The treaty of Philip II with Amphipolis ( $357 / 6 \mathrm{BC}$ ) by which the supporters of Athens are banished from the city was probably imposed by the Macedonian king and it is noteworthy that it is written in Western Ionic (SIG ${ }^{3}$ 194; Hatzopoulos op. cit., vol. 2, no 40; Rhodes \& Osborne op. cit., no 49).

11 On the basis of the literary evidence Hammond (1994b) holds that an Aeolic dialect was spoken in Low Macedonia and a north-west dialect in Upper Macedonia.

12 The earliest mention of the Macedonian name appears in Hesiod, fr. 7, where the eponymous ancestor Macedon is said to be the son of Zeus and of one of Deucalion's daughters.

13 For the text see Appendix, p. 287.
14 The personal pronoun 0 ú $\mu \varepsilon \varsigma$ quoted by Athenaeus ( 7.323 b ) from the comedy entitled Macedonians by Strattis is contradicted by the Pella curse tablet. For the possibility that the ethnic Kpavvéotņ (IG 10.2.2.1.36, Roman period) attests the same Aeolic development of the ancient cluster -sn- between vowels see Hatzopoulos 2007b, 233 f .

15 The spellings < $\tau \tau>$ (and $<\sigma \sigma \tau>$ ) instead of $<\sigma \theta>$ in $\gamma \varepsilon v \varepsilon \dot{\varepsilon} \sigma \theta \alpha 1$ is interpreted as a device to represent the plosive value of $\langle\theta>$ in this context against the fricative value of $\langle\theta\rangle$ in other environments (Méndez Dosuna 1985, 389-94).

16 The curse tablet has $\triangle A \Gamma$ INA where the $\Gamma$ is understood as a scribal error for $\Pi$.
on the leadership of the Greeks, states that the king was the only Greek who deemed it worthy to rule a people who were not of the same race ( $\mu$ óvos үò $\rho$
 osthenes (Third Olynthiac 24, Third Philippic 31, On the False Embassy 308) and other authors stressed that not only the Macedonians but also Philip himself were non Greeks.

Other modern authors, however, could not believe that Euripides, Agathon, Gorgias, and others could have lived there, composed and played tragedies and other literary works, if the king and his court did not speak Greek. As for the attacks by Demosthenes against Philip as a barbarian, they have to be taken as mere abuses, which by the way are contradicted by the fact that the king took part in the Olympic Games as his predecessors had done since more than a century earlier (see Herodotus 5.24). As reported by Livy (31.29.15), Macedonians, Aetolians, and Acarnanians spoke the same language.

5
The curse tablet of Pella ${ }^{13}$
The earliest Macedonian document that is long enough to be taken as dialectal was found in Pella in 1986 and published in 1993 (see Voutiras 1993, 1996, 1998; Bull. épigr. 1994, 413; Dubois 1995; O'Neil 2006). It is scratched on a sheet of lead in the Milesian alphabet, and has been dated around the middle of the 4 th century $B C$. The content of its nine inscribed lines is a magical curse that a woman in love addresses against the eventual marriage of a man called Dionysophon with a woman called Thetima. Its main dialectal features are as follows:

Phonetics and Phonology

- first compensatory lengthening: $\gamma \tilde{\alpha} \mu \alpha ı, \dot{v} \mu \tilde{\omega} \mu ;{ }^{14}$
- retention of *ar;
- contraction of *a:o: > a:;
 $\rho u ́ \xi \alpha \sigma \alpha ;$
- hyphaeresis of [eo] > [e]: Өรtíu ;
- assimilation of [ign] > [i:n]: үívo $\mu \alpha$;
- merger of <EI> and <I>: $\pi \alpha ́ \lambda \varepsilon ı v$ for $\pi \alpha ́ \lambda ı v, ~ i ̉ \mu \varepsilon$ for $\varepsilon i \mu i ́, ~ \delta \alpha \pi \iota v \alpha ́$ for $\tau \alpha-$ ส $\varepsilon$ เvá;
- fricativization of [ $\left.\mathrm{t}^{\mathrm{h}}\right]$ indirectly demonstrated by the spelling <o兀>, which stands for [sth]: $\uparrow \varepsilon v \varepsilon ́ \sigma \tau \alpha \downarrow$ for $\gamma \varepsilon v \varepsilon ́ \sigma \theta \alpha 1 ;{ }^{15}$
- voicing of $/ t />[d]$, if $\delta \alpha \pi \iota v \alpha ́$ is to be understood as $\tau \alpha \pi \varepsilon ı v \alpha ́$ (see 5.3 below). ${ }^{16}$
Morphology
- genitive singular of -a-masculine nouns in -a:;
- plural dative $\delta \alpha \iota$ иóбı;
- singular dative of the first person pronoun $\varepsilon$ énív, also attested in epigraphic and literary Doric;
- temporal adverbs and conjunctions ending in -к $\alpha$ : опок $\alpha$, ток $\alpha$;
- apocope of the short final vowel of kató in its function as a preverb before a dental stop ( $\pi \alpha \rho \kappa \alpha \tau \tau i ́ \theta \varepsilon \mu \alpha \_$), but not before a velar stop: $\kappa \alpha-$ $\tau \alpha ү \rho \alpha ́ \varphi \omega, \sigma \cup \gamma \kappa \alpha \tau \alpha ү \eta \rho \tilde{\sigma} \sigma \alpha 1$. There is no apocope in $\alpha v \alpha \gamma v o i ́ \eta v$.
The Pella curse tablet revealed a new dialect of Ancient Greek. Its dialectal features do not coincide with any other dialect known so far and it has no trace of influence of the Attic-Ionic koine. The love defixio provides a new form of North-West Doric and has no parallel in the literary dialects. The curse tablets known so far are all written in the local dialect of the place where they were found, and there is no reason to think that this tablet does not conform
to this general rule. Since the Pella curse tablet displays a combination of dialectal features that differ from all other local or literary dialects, the possibility that it was written in some other dialectal area and then brought to Pella must be excluded. Being exclusively attested in ancient Macedon (cf. Méndez Dosuna 2007 b and 6 below), this dialect can be rightly called Macedonian. It is as poorly and lately documented as for instance the Pamphylian dialect, but there is no doubt about the fact that it is a Greek dialect.

A number of features of the Pella curse tablet are confirmed as Macedonian by glosses:

## 5.1

Opening of [i] and [u]
 Mak\&סóvȩ) also points to the merger of [o] and [u] if $\alpha$ 人ßpoteऽ stands for $\dot{\alpha} \beta \rho o ́ f \varepsilon \varsigma . ~ L i k e w i s e, ~ t h e ~ M a c e d o n i a n ~ m o n t h ' s ~ n a m e ~ A u ́ \delta u v \alpha i ̃ o s ~ i n ~ a n c i e n t ~$ sources appears alternatively as Aủ $\delta \omega v \alpha i ̃ o \varsigma$, 'Aï $\delta \omega v \alpha i ̃ o \varsigma ~ a n d ~ A u ̉ \delta v \alpha i ̃ o \varsigma . ~ F u r-~$
have been convincingly explained by Brixhe $(1999,47$ f.) as Macedonian features preserved in the local koine.

## 5.2

ү'́үvo $\mu \alpha l>$ [gí:nomai]
The assimilation $\gamma \dot{\prime} \gamma v o \mu \alpha l>$ [gí:nomai] is also found in other dialects and need not be ascribed to Attic-Ionic influence.

### 5.3 Voiced and voiceless plosives

If $\delta \alpha \pi \iota v \alpha ́$ is to be interpreted as $\tau \alpha \pi \varepsilon \iota v \alpha ́$, as suggested by Dubois (1995) and generally accepted, then a voiced stop may stand for the expected corresponding voiceless plosive. Other probable instances appear in an Attic inscription (IG $1^{3} .89$, Athens, $423 / 2 \mathrm{BC}$ ) that records a treaty between the king Perdiccas II of Macedon and Athens. Two personal names -not attested else-where- given in the list of Macedonians who swore the treaty with the Athenians are Bopסĩvos (line 72), which may stand for Портĩvoऽ, derived from пópuıऽ 'calf', and Bupүĩvo̧ (line 61), which recalls Attic Фuркĩvo̧ (see Masson 1998; Hatzopoulos 2006, 43). ${ }^{17}$

Hatzopoulos (1987a; 2006,42) interprets the epithet $\Delta$ ıүoĩ $\alpha$ (also written $\Delta \varepsilon ⿺-$ $\gamma \alpha i ̃ \alpha$ and even $\Delta \varepsilon ı \gamma \varepsilon ́ \alpha)$ as $\Delta ı k \alpha i ́ \alpha$, which is as an attribute to Artemis. This term appears in a group of inscriptions from the Roman period found in the territory of Aegae (modern-day Vergina) and recording deeds of manumission (see SEG 27.277; Bull. épigr. 1977, 269; 1984, 250). If this interpretation is correct, the epithet would be a further case of the spelling of a voiced for a voiceless plosive. ${ }^{18}$

The sporadic use of a voiced plosive in place of the expected voiceless stop has parallels in the district of Tripolis in Perrhaebia, in northern Thessaly. According to Hatzopoulos (2007a, 167-76), such spellings reflect a pronunciation shared in southern Macedon and in northern Thessaly. Helly (2007, 196f.), however, pointed out that the dialectal features common to Tripolis of Perrhaebia and to Macedon are due to the settlement of Macedonian population in this northern district of Thessaly, when it fell under the power of the Macedonian kings in mid 5th century BC. ${ }^{19}$

## 6

Further recently found documents
Other early documents found in Macedon after the Pella love defixio are written in the Attic-Ionic koine or are strongly influenced by it. They are brief

17 For $\sum \tau \alpha \delta \mu \varepsilon ́ \alpha \varsigma$, a derivative from $\sigma \tau \alpha \theta$ ós, in the same list, see 8 below.

18 For $\mathrm{B} \lambda \alpha \gamma \alpha v(\varepsilon) \tilde{\tau} \tau 1 \varsigma$ see below fn. 26.
19 For the spellings of voiced instead of voiceless see 8 below.

20 See Karamitrou-Mentesidi 1993; Bull. épigr. 1994, 385; Brixhe 1999, 42f.; Panayotou-Triantaphyllopoulou 2007 b .

21 IG $1^{3} .89$ (Athens, 423/2) records a treaty of alliance between Athens and the Macedonian king Perdiccas II that ends with a list of fourtyfive names of Macedonians. A catalogue of thirty eponymous priests of the new city of Kalindoia is registered in Hatzopoulos 1996, vol. 2, no 62 (end of the 4 th century $B C$ ). The sixty-five monuments -most of them funerary steles- found in Vergina register eighty-nine personal names. A list of thirty-one personal names appears in Hatzopoulos op. cit., vol. 2, 79 (Mygdonia, Lete, ca. 350-300 BC). An unpublished lead defixio (SEG 49.750, Oraiokastro Mygdonia, classical period) gives the names of the sons of a certain
 and Mév $\omega v$.

22 Most epithets of gods, place names, and month names are also Greek.

23 For Macedonian personal names see the Lexicon of Greek Personal Names [LGPN] IV.
texts or consist of lists of personal names or lack dialectal features enough to allow us to ascertain their dialect.

Among the five documents found in Aiane (Elimeia), one of them, a graffiti painted on a jar written in the Milesian alphabet that could be dated at the beginning of the 5th century BC, has the phrase [...] ${ }^{\prime} \lambda$ ıo the property of -alis, the daughter of Dolios'). This inscription can be Ionic because of the $\eta$ in the article and the genitive ending -los of a noun with a nominative in -ıc. The other documents do not tell us anything as far as the dialect is concerned. ${ }^{20}$

A group of curse tablets found in Pydna (Pieria) and datable at the end of the 4th century BC consist mainly of lists of personal names (see Curbera \&
 7), and $\delta u v \alpha ́ \sigma \sigma \theta \omega$ (line 10) alongside with a number of koine features.

A fragmentary judicial curse tablet from Arethousa (see Moschonisioti, Christidis \& Glaraki 1997; SEG 47.885, early 3rd century BC) has only three forms that are of some help in ascertaining its dialect: the plural feminine genitive $\pi \alpha \sigma \tilde{\alpha} v$, which displays the Doric contraction [a:०:] > [a:], and several
occurrences of öбol and of $\gamma \rho \alpha ́ \varphi \varphi \omega$.

Julián Méndez Dosuna (2007b) has called the attention to an oracular question found in the sanctuary of Dodona and probably asked by a Macedonian (see Méndez Dosuna in this volume). Despite its brevity, the text presents a combination of dialectal features that do not match any other dialect. Since the name of the consultant is $K \varepsilon \beta \alpha \lambda^{\prime}$ ıos, a derivative from $\kappa \varepsilon \varphi \alpha \lambda$ и́, with $\beta$ instead of $\varphi$ (see Hesychius $\kappa \varepsilon \beta \alpha \lambda$ '́ $\kappa \varepsilon \varphi \alpha \lambda \eta$ ), as B $\alpha^{\lambda} \lambda \kappa \rho \circ \varsigma$ instead of $\Phi \alpha ́ \lambda \alpha \kappa \rho \circ \varsigma$,
 Macedonian examples, the probability of him being a Macedonian is high.

7

## Personal names

Several Macedonian inscriptions contain catalogues or lists of personal names. ${ }^{21}$
Being the linguistic evidence so scanty and the issue of language so disputed, it is no surprise if personal names have drawn much attention, because their form can shed light on the language of those bearing such names. ${ }^{22}$

Macedonian personal names are mostly Greek. This is valid both for the names directly attested as well as for the names documented by literary sources. ${ }^{23}$ The total number of Greek as against non-Greek names remained constant over time. Following Hatzopoulos $(2000,103)$, they fall into the following groups:

1 names with a clear Greek etymology which can be considered as local because they diverge from the phonetic standards of Attic-Ionic koine (e.g., M $\alpha \chi \alpha ́ \tau \alpha \varsigma$ ) or because they remained practically confined to Macedonians throughout antiquity (e.g., Патعрĩvoৎ);
2 panhellenic Greek names: K $\alpha \lambda \lambda i ́ \mu \alpha \chi о \varsigma$, 'Aто $\lambda \lambda \omega ́ v ı \rho$;
3 identifiable foreign names: 'А $\mu \alpha ́ \delta о к о \varsigma ~ a n d ~ ' А \mu \alpha ́ т о к о \varsigma ~(T h r a c i a n), ~ П ~ П \alpha ́-~$ $\tau \omega \rho$ (Illyrian), $\Delta$ oú $\eta \eta \varsigma$ (spread all over Macedon, but without Greek etymology);
4 names without a readily recognizable Greek etymology but which nevertheless cannot be ascribed to any identifiable non-Greek linguistic group (e.g., Bopסĩvo̧).

8
The spellings $B, \Delta, \Gamma$ instead of $\Phi, \Theta, X$
Macedonian inscriptions from the 4th century $B C$ onwards attest occasional spellings of $\beta$, $\delta$, or $\gamma$ where the other Greek dialects have $\varphi, \theta$, or $\chi$, respec-
tively. Instances of $\beta$ for $\varphi$ are more frequent, but there are also cases of $\delta$ for $\theta$ and of $\gamma$ for $\chi$. The feature is so frequent that it seems to constitute a Macedonian shibboleth, i.e., a distinguishing practice that is indicative of one's social or regional origin. ${ }^{24}$

Some epigraphic instances of voiced plosives for the phonetic result of the Indo-European aspirates are as follows (see Panayotou 1993): Bعpvík (SEG 35.798, Aegae, end of the 4th century BC), Brpevv'́ (SEG 35.775, Aegae, ca. 350 BC), K $\varepsilon \beta \beta \alpha$ (SEG 35.804 , Aegae $300-275$ BC, hypocoristic of the name $K \varepsilon ́ \beta \alpha \lambda o \varsigma)$. Hatzopoulos (1987a) called attention to the feminine personal names Bí $\alpha$, Bı $\lambda_{i ́ \sigma \tau \alpha, ~ B ı \lambda ı \sigma \tau i ́ x \eta, ~ w h i c h ~ c o n s t i t u t e ~ a ~ c o m p l e t e ~ s e r i e s ~ t h a t ~ m a t c h e s ~ Ф i ́ \lambda \alpha, ~}^{\text {, }}$ $\Phi \downarrow \lambda_{i ́ \sigma \tau \alpha}, \Phi_{1} \lambda_{\imath \sigma \tau i ́ x \eta}$. Bí $\lambda_{\imath} \sigma \tau o \varsigma$ is found twice in the ephebic lists from Styberra (see Papazoglou 1988).

An Orphic gold lamella attests the feminine personal name Bou $\lambda_{0} \mu \alpha \alpha^{\gamma} \alpha$ (SEG 40.541, Methone, ca. $350-300 \mathrm{BC}$ ). The first element of the compound probably represents $\Phi \cup \lambda 0-$ and the second certainly corresponds to AtticIonic - $\mu \alpha ́ \chi \eta$ (see Masson 1984; Hatzopoulos 2007a, 171).
 stead of Фعрعvíк $\alpha$, the place name Bépol $\alpha$ founded as Ф $\varepsilon \rho \omega v \alpha$ according to Herodianus (1.281), and the appellatives $\kappa \varepsilon \beta \alpha \dot{\lambda} \lambda \alpha$ against $\kappa \varepsilon \varphi \alpha \lambda \eta$ (see Hesy-
 Glosses with the apical or the velar voiced plosives are: $\dot{\alpha} \delta \tilde{\eta}$ if it corresponds to $\alpha i \theta$ ท́p 'sky'; $\delta \alpha ́ v o s ~ t o ~ Ө \alpha ́ v \alpha \tau o \varsigma ~ ' d e a t h ' ; ~ \alpha ̌ \delta \rho \alpha ı \alpha ~ t o ~ \alpha i \theta \rho i ́ \alpha ~ ' b r i g h t ~ w e a t h e r ' ; ~$ $\Pi u ́ \delta v \alpha$, if derived from $\pi \nu \theta \mu \eta$ v 'bottom'; and үó $\lambda \alpha$ to хó $\lambda$ os 'gall'.

Literary authors use words that exhibit this feature: Callimachus, fr. 657, $\kappa \varepsilon \beta \lambda \eta$ 'head'; Aristophanes, Birds 303, кєß $\lambda_{\eta} \pi \tau \nu \rho ı \varsigma$ ('red-cap bird'); Euphorion 108 кє $\beta \lambda$ ńүovos 'born from the head' applied to Athena; and Nicander, Alexifarmaca 433, $\kappa \varepsilon \beta \lambda$ ńүovos in the sense of 'with its seed in its head'. The menonym 'Yлгр $\beta \varepsilon \rho \varepsilon \tau \alpha i ̃ o \varsigma ~ s e e m s ~ t o ~ c o r r e s p o n d ~ t o ~ A t t i c ~ ט ́ \pi \varepsilon \rho \varphi \varepsilon \rho \varepsilon ́ \tau \eta \varsigma . ~ A c-~$ cording to Plutarch, Macedonians use $\beta$ instead of $\varphi$, while Delphians use $\beta$ in lieu of $\pi .{ }^{25}$

Particular attention deserves the personal name $\Sigma \tau \alpha \delta \mu \varepsilon ́ \alpha \varsigma$ (IG 13.89.64, Athens, $423 / 2 \mathrm{BC}$ ), referred to one of the Macedonians who was led by Perdiccas II and signed the treaty of alliance with the Athenians mentioned above (5.3). If it derives from $\sigma \tau \alpha \theta \mu$ ós, a new occurrence of $\delta$ for $\theta$ is to be added (see Masson 1998,118 ). The name $\sum \tau \alpha \lambda \mu \varepsilon ́ \alpha \varsigma$ in a Macedonian inscription is probably the same name and is parallel to 'A $\delta \varepsilon \tilde{\varepsilon} \alpha \Sigma \tau \alpha \delta[\mu] \varepsilon i ́[o v]$, the derivative $\Sigma \tau \alpha \theta \mu i^{\prime} \alpha \varsigma$ of which appears in Mantinea of Arcadia. If this interpretation holds, the sporadic spelling of voiced instead of aspirates would go back to the last quarter of the 5 th century BC . If the name of the lake Boí $\beta \eta$, situated in the Thessalian plain, represents $\Phi \circ i ́ \beta \eta$ 'bright', this would be another instance of the same change (see Hatzopoulos 2007a, 170; Helly 2007, 212f.). ${ }^{26}$ Note that what we find is the occasional spelling B, $\Delta, \Gamma$ instead of $\Phi, \Theta, \mathrm{X}$, but not the other way around, a fact that excludes the possibility of arguing for a merger between voiced and aspirates. The only isolated occurrence of $\Phi$ for $B$ is $\beta \varepsilon \varphi \alpha i ́ \omega \varsigma$ instead of $\beta \varepsilon \beta \alpha i ́ \omega \varsigma$ in a deed of sale of 352-350 BC found in Amphipolis (see Hatzopoulos 1996, vol. 2, no 88). (Note that this city was conquered by Philip II only in 357 BC.)

## 9

Interpretations of the spellings $B, \Delta, \Gamma$ instead of $\Phi, \Theta, X$ 9.1

The Non-Greek Hypothesis
A most repeated view (that goes back to P. Kretschmer and that only relied on the glosses) holds that the spelling of a voiced plosive in the place of a homorganic voiceless aspirate shows that Macedonian was an Indo-European

24 The term shibboleth is properly applied to this phenomenon by Méndez Dosuna (2007b, 284).

25 Moralia 292e 4-7 (= Questiones Graecae):




26 Hatzopoulos (1987a; 2006, 42) interprets the epithet $\mathrm{B} \lambda \alpha \gamma \alpha v(\varepsilon)$ ĩ $\tau \varsigma$ of Artemis, in a group of inscriptions registering liberation acts found in the territory of Aegae, as a case of spelling of a voiced for an aspirate plosive (see SEG 27.277; Bull. épigr. 1977, 269; 1984, 250). B $\lambda \alpha \gamma \alpha v(\varepsilon) \tilde{\tau} \tau \iota$ would refer to the fact that Artemis was worshipped $\dot{\varepsilon} v \mathrm{~B}(\lambda) \alpha \gamma \alpha ́ v o r s$, and the place name could be interpreted as 'in (the place of) frogs' on the basis of the gloss $\beta \lambda \alpha \chi \alpha ́ v \cdot \dot{o} \beta \alpha \dot{\tau} \tau \rho \alpha \chi \circ$. In another inscription Artemis is called [ $\tau \tilde{\omega} \vee \beta$ ] $\alpha \tau \rho \alpha ́ \chi \omega \nu$.

27 After Lejeune, the term pre-Mycenaean (pre-mycénienne) refers to the period before the adaptation of the Linear B script for the notation of Greek.

28 "... did not characterize the entire Macedonian language but only the language of one of the tribes of the non homogenous Macedonian nation before the time of Philip II."

29 The Pella curse tablet has $\Delta$ tovu$\sigma 0 \varphi \tilde{\omega} v \tau \circ \varsigma$ (twice), $\kappa \alpha \tau \alpha \gamma \rho \alpha ́ \varphi \omega, \chi \eta \rho \tilde{\alpha} v$, $\pi \alpha \rho \theta \varepsilon ́ v \omega v, ~ Ө \varepsilon \tau i ́ \mu \alpha$ (three times), $\pi \alpha \rho \kappa \alpha \tau \tau i ́ \theta \varepsilon \mu \alpha 1$, $\varphi i ́ \lambda[\mathrm{o}] \imath$ (twice), and $\varphi \cup \lambda \alpha ́ \sigma \sigma \varepsilon \tau \varepsilon$.

30 The Bryges were probably also responsible for the wavering between voiced and unvoiced in the Macedonian pronunciation of the Greek plosives (see 5.3 above).

31 Since the inherited voiced aspirates also lost their aspiration in Thracian (see Brixhe \& Panayotou 1994a, 199), this language may have also been responsible of the origin of the voiced plosives in Macedonian.
language in which the inherited voiced aspirates lost their aspiration ( ${ }^{b^{h}}>\mathrm{b}$, ${ }^{*} \mathrm{~d}^{\mathrm{h}}>\mathrm{d},{ }^{*} \mathrm{~g}^{\mathrm{h}}>\mathrm{g}$ ). This, of course, goes against what happened in Greek, where, as known, the inherited voiced aspirates were devoiced ( $* \mathrm{~b}^{\mathrm{h}}>\mathrm{p}^{\mathrm{h}}, *^{\mathrm{h}}>\mathrm{t}^{\mathrm{h}}$, *gh $^{\mathrm{h}}$ $>\mathrm{k}^{\mathrm{h}}$ ) at a date earlier than the Mycenaean tablets and the adaptation of the Linear B script to the notation of Greek. ${ }^{27}$ According to Kretschmer, Macedonian and Greek differed from one another because they were different IndoEuropean languages.

The above hypothesis is erroneous. As pointed out by Panayotou (1993, 28), a voiced plosive stands for the corresponding inherited voiced aspirate only sporadically. ${ }^{28}$ The result of the treatment of the Indo-European aspirates in Macedonian inscriptions is generally spelled $\varphi, \theta$, or $\chi$ : e.g., $\Theta \varepsilon ́ \mu \iota \delta$, (SEG 39.567a, Elimeia, Aiane, 5th century BC); M $\alpha \chi \alpha ́ t \alpha ৎ ~ \Lambda ı \kappa \kappa ט ́ p o v ~ i n ~ a ~ f u n e r-~$ ary epitaph (SEG 54.612, Orestis, Pentavryson, mid-4th century BC); $\beta \alpha \sigma \iota \lambda \varepsilon ́ \omega \zeta$
 early 4th century BC; cf. SEG 47.944). ${ }^{29}$

Note however that no appellative, personal name, or place name occurs with both alternative spellings in the same document, a fact that would dis-
prove in a definitive manner the hypothesis that Macedonian is a non-Greek Indo-European language.

To conclude, spellings B, $\Delta$, or $\Gamma$ instead of $\Phi, \Theta$, or X for the inherited voiced aspirates occur only sporadically and are far from being the result of an unconditioned sound law. Nor is the development of the aspirates to voiced plosives conditioned by a given phonetic environment or by the date or the geographic origin of the document; rather, it is probably a sociolinguistic pattern that explains its occasional occurrence.
9.2

The Borrowings Hypothesis
Brixhe \& Panayotou (1994b), Brixhe (1999) and Panayotou (2001, 322f. $=\mathrm{Pa}-$ nayotou 2007a) have suggested that spellings with a voiced plosive show that Macedonian assimilated vocabulary, place names, and personal names from populations who inhabited Macedon but spoke an Indo-European language in which the inherited aspirates lost their aspiration.

The historical Macedonians would have been the product of fusion of two linguistic groups; one that spoke a Greek dialect akin to the North-West dialects which was in use till the end of the Hellenistic period, and another that spoke a variety of Phrygian. As reported by Herodotus (7.73), the members of this latter group were called Bри́үєऽ before their migration from Thrace to the Anatolian peninsula, where they got the name Фрúү६ऽ. The language of the Bryges became extinct in the 5th century after having caused a strong impact on the religion and on the personal names of the Macedonian ruling class, attesting thereby the significant role played by the speakers of this language in the genesis of the historical Macedonian entity.

One of the features of the language spoken by the Bryges -also observed in their ethnic name- is that the inherited Indo-European aspirate plosives lost their aspiration: thus, we find in Phrygian edaes from the root *dheh - 'place, do’, and Neo-Phrygian $\alpha \beta \beta \varepsilon \rho \varepsilon \tau$ (five occurrences) and $\alpha \beta \beta \varepsilon \rho \varepsilon \tau \circ \rho$ (three occurrences) from the root * $b^{h}$ er- 'carry, bear'. ${ }^{30}$

The language of the Bryges -a variety of Phrygian that can be called Brygian for convenience- became progressively isolated in Macedon, where the majority of the population were speakers of Greek, and finally disappeared before our first documents. Traces of it are left in the pronunciation of place names and personal names and in glosses brought together by lexicographers at a time when the language had long been dead. ${ }^{31}$

The borrowing of Brygian lexical items into the Greek dialect of Macedon would explain, among others, a number of features of Macedonian, namely the high frequency of unexpected voiced plosives in specific areas of the lexicon such as personal and place names, the absence of double spellings for the name of the same individual, and the irregular distribution of the voiced plo-


The "Brygian" interpretation of the Macedonian spellings with voiced plosives in the place of aspirates has been the subject of an intense and sharp discussion. Hatzopoulos (2000, 2007a; see also Dubois, Bull. épigr. 2000, 210; Helly 2007) called the attention on the personal names K $\varepsilon \beta \alpha \lambda i ̃ v o \varsigma ~ a n d ~ B \varepsilon ́ \tau \tau \alpha \lambda$ оऽ (EKM Beroia 4, 223 BC; cf. SEG 54.603), which deserve a detailed consideration. ${ }^{32}$

Although there are no examples in Macedonian of a voiced plosive as a result of an inherited labiovelar aspirate, the genitive of the personal name Bet兀ó $\lambda$ ou has an initial consonant that changed at the same time as did the labiovelars before [e]. Bév $\tau \alpha \lambda$ o̧ is probably the same name as the ethnic "Thessalian". The contrast between Attic $\Theta \varepsilon \tau \tau \alpha \lambda$ ós and Boeotian $\Phi \varepsilon \tau \tau \alpha \lambda$ ó ${ }^{2}$ indicates that, regardless of its etymology, whatever the old initial consonant would have been, it was developed in the same way as the labiovelar * $g^{w h}$ followed by [e]. ${ }^{33}$ Now since the devoicing ${ }^{*} g^{w h} e_{-}>{ }^{*} k^{w h} e^{-}$is of pre-Mycenaean date, ${ }^{34}$ while the loss of the labiovelars before [e] is post-Mycenaean (as shown by the existence of a specific series of syllabogrammes to note labiovelars, as in e-qe-ta [hekwéta:s], qe-to [kwéthos], cf. $\pi i ́ \theta o \varsigma$, and so on), it results that if such development took place at the same time throughout the Greek speaking area, Bé $\tau \tau \alpha \lambda$ os must have come up in the post-Mycenaean period (see Dubois, Bull. épigr. 2000, 210; Helly 2007, 213; Hatzopoulos 2007b, 230f.). In other words, we can reconstruct the following sequence of changes:

1 pre-Mycenaean devoicing of aspirates: $*^{\mathrm{b}}, *^{\mathrm{h}}, *^{\mathrm{h}}, *^{* w h}>\mathrm{p}^{\mathrm{h}}, \mathrm{t}^{\mathrm{h}}, \mathrm{k}^{\mathrm{h}}, \mathrm{k}^{\mathrm{wh}}$;
2 post-Mycenaean treatment of labiovelars before [e(:)];
3 occasional Macedonian spelling B, $\Delta, \Gamma$ for $\Phi, \Theta, \mathrm{X}$.
We can safely conclude that the Macedonian voiced plosives developed already in post-Mycenaean times.

K $\varepsilon \beta \alpha \lambda$ ĩvos derives from the root * $g^{h} e b^{h}(e) l$ - witnessed in OHG gebal 'skull' (see Chantraine, DELG s.v. $\kappa \varepsilon \varphi \alpha \lambda$ 亿́). The first plosive in $K \varepsilon \beta \alpha \lambda \tilde{\mathrm{l}} v o$ c is in keeping with what is expected in Greek, but its second consonant presents the characteristic Macedonian voiced plosive instead of the expected voiceless aspirate of other Greek dialects. The regular phonetic outcome would be Kغ $\varphi \alpha \lambda$ ĩvos in Greek and ${ }^{*} \Gamma \varepsilon \beta \alpha \lambda \tilde{\lambda} v o \varsigma$ in the supposed Brygian. K $\beta \beta \alpha \lambda \tilde{i} v o \varsigma$ is not a borrowing from Brygian *Гє $\beta \alpha \lambda \tilde{\mathrm{i} v o}$, but the result of a partial phonetic interference on Greek $\operatorname{K\varepsilon \varphi } \alpha \lambda \tilde{\mathrm{i} v o}$. In other words, we can reconstruct the following sequence of changes for Greek:

1 inherited form: * $g^{h} e b^{h}(e) l-$;
2 pre-Mycenaean devoicing of inherited voiced aspirates: $k^{h} e p^{h} a l-$;
3 post-Mycenaean dissimilation of aspirates (Grassmann's Law): kephal-;35
4 partial phonetic interference caused by a non-Greek Indo-European language in which the inherited aspirate plosives lost their aspiration: kebal(innos).
If this chronological sequence of changes holds, the conclusion to be drawn is that the influence of the supposed non-Greek language on the Macedonian dialect of Greek is post-Mycenaean.

It should be noted that $K \varepsilon \beta \alpha \lambda$ ĩvos is not the Brygian outcome, but a hybrid that mixes together a Greek and a Brygian treatment of the inherited aspirates. This means that K $\kappa \beta \alpha \lambda \tilde{\imath} v o s$ is not a lexical item borrowed as such by Greek, but a Greek word that underwent the transfer of a plosive as a result of the phonetic interference caused by the consonant that the same word had in

32 For K $\beta \beta \lambda$ ĩvos see IG 11.2.137, Delos, 313302; 145, Delos, 302 BC and 154, Delos, 296 BC; Tataki 1998, 339; Hatzopoulos 2007a, 171, fn. 79; for Bé $\tau \tau \alpha \lambda$ os see EKM Beroia 4, 223 BC; SEG 54.603.

33 There is no instance of a voiced plosive resulting from an inherited aspirate labiovelar
 $<^{*} g^{w h} e r-, \theta \varepsilon i ́ v \omega$, ழóvos < * $g^{\text {wh }}$ en-, * $g^{\text {wh }}$ on-).

34 Thus, to-no (thórnos 'chair') is written with the same initial consonant as to-so (tós(s) os 'so much'), but not-do-ke (dó:ke '(he) gave'). See Lejeune 1972, 30.

35 The dissimilation of aspirates or Grassmann's Law (* $t^{h}$ répho: > $\tau \rho \varepsilon ́ \varphi \omega$; *hék $\left.{ }^{h} 0:>{ }^{\prime} \chi \chi\right)$ is most probably later than the devoicing of the inherited voiced aspirates and the Mycenaean tablets (cf. Lejeune 1972, 56f.).
another language spoken in the same community. We are dealing not with a lexical borrowing of a foreign word but with the transfer of a foreign sound to a Greek word. This leads to the conclusion that K $\varepsilon \beta \alpha \lambda$ ı̃vos is the outcome of a phonetic interference between languages spoken in the same community.

## 9.3

The Fricativization Hypothesis
In a number of studies, Hatzopoulos (1987b, 2000, 2006, 2007a) argues that the spellings B, $\Delta$, and $\Gamma$ for $\Phi, \Theta$, and X, respectively, in Macedonian inscriptions written in koine and in glosses attributed to Macedonian, show that the voiceless aspirates and the voiced plosives became fricatives at an early date. The spellings $B, \Delta, \Gamma$ would reflect the development of the voiceless aspirates ( $\Phi, \Theta$, X ) into voiceless fricatives and the parallel shift of the voiced plosives ( $\mathrm{B}, \Delta, \Gamma$ ) into voiced fricatives. In other words, the spellings $B, \Delta, \Gamma$ for $\Phi, \Theta, \mathrm{X}$ would be accounted for by the following shift chain:

1 voiced plosives shift into voiced fricatives or approximants $(b, d, g>\beta$, б, $\quad$ );
2 aspirated voiceless plosives become voiceless fricatives ( $\mathrm{p}^{\mathrm{h}}, \mathrm{t}^{\mathrm{h}}, \mathrm{k}^{\mathrm{h}}>\mathrm{f}, \theta$, X);

3 voiceless fricatives become voiced (f, $\theta, \chi>v, ð, \gamma$ ).
As Brixhe (1999, 58f.) has remarked, such a shift chain while not impossible is highly uneconomical and presupposes an early date for the fricativization of the plosives, a change taken to have spread in the 1st century BC (see Lejeune $1972,55,61$ ). It is true that in other dialects there are spellings that are probably to be accounted for as the result of an early fricativization (see Lejeune op. cit., 54ff.), but such cases are not as frequent as they would be in Macedonian. The interpretation of the occasional spellings $B, \Delta, \Gamma$ as the result of the early fricativization of the voiceless aspirates in Macedonian gives an internal account for the shift but presupposes an early date that lacks parallels in the history of Greek.

Furthermore, spellings such as $\delta \alpha \pi \iota v \alpha ́$ for $\tau \alpha \pi \varepsilon ı v \alpha ́ ~ t h a t ~ w e ~ h a v e ~ s e e n ~ a b o v e ~$ (5.3), Hatzopoulos argues, would also indicate that the voicing of the voiceless plosives and of the aspirate plosives took place already in the 4th century BC or even earlier. Thus, the Macedonian phonological system would match what is found in modern Spanish and is reconstructed for Gothic, languages in which voiced plosives have two phonetic realizations depending on the environment. In Spanish, while such phonemes are realized as plosives after pause, after a nasal consonant (/m/, $/ \mathrm{n} / \mathrm{l} / \mathrm{n} /$ ), or, in the case of $/ \mathrm{d} /$, after a lateral fricative $(/ l /, / K /)$, they are realized as fricatives in the remaining cases. In Gothic, /b, d, g/ were realized as approximants $[\beta, \partial, \gamma]$ between vowels. However, this is not what is found in Macedonian, where two of the three alleged instances of a voiced instead of the expected voiceless plosive appear at the beginning of a word, probably after pause: oíктípete, $\delta \alpha i ́ \mu о v \varepsilon \varsigma ~ \varphi i ́ \lambda o \imath, ~ \delta \alpha-$ $\pi ı v \alpha ̀ ~ \gamma \alpha ̀ \rho ~ i ̉ \mu \varepsilon ̀ ~ \varphi ~ \varphi i ́ \lambda \omega v ~ \pi \alpha ́ v \tau \omega v ~(l i n e ~ 6 ~ o f ~ t h e ~ P e l l a ~ c u r s e ~ t a b l e t) ~ a n d ~] v o \varsigma, ~ B o \rho \delta ı v o[~$ in the list of Macedonians who conducted the treaty with Athens (IG 13.89.72, $423 / 2 \mathrm{BC}$ ). As known, in such environment plosives are stable throughout the history of Greek.

According to Hatzopoulos (2000, 115f.), the shift of the voiced and voiceless plosives into fricatives can be explained as the outcome of an internal development of Greek and is not due to any lexical or phonetic interference from some other language. Rather, such pronunciation would be an isogloss shared by the Macedonian and the Thessalian dialect of Perrhaebia, where personal names manifest the same phenomenon: $\Delta \rho \varepsilon \beta \varepsilon ́ \lambda \alpha o \varsigma ~(=~ * Т \rho \varepsilon \varphi \varepsilon ́ \lambda ~ \lambda \varepsilon \omega \varsigma), ~$ Bou $\lambda_{0}$ vó $(=\Phi u \lambda o v o ́ \alpha)$. As we have seen, the isogloss seems to be due to the
migration of Macedonian population subsequent to their conquest of the region in the 5th century BC (see Helly 2007, 196f.).

## 9.4

The Interference Hypothesis
As we have seen, the attempt to offer an internal phonetic explanation of the spellings under consideration is at odds, in the case of the development of the plosives into fricatives, with the chronology of this sound change in the history of Ancient Greek, while in the case of the merger of voiced and voiceless plosives it comes up against the stability of the voiceless plosives in the history of Greek, in addition to the fact that it lacks any parallels in other languages. Under such circumstances, it seems safer to resort to the possibility that the voicing is due to the wrong transfer to Macedonian of a sound from a foreign language. In other words, the spelling of voiced plosives in lieu of aspirates may be accounted for by assuming that native speakers of a language make a wrong application of an articulatory habit in the pronunciation of a given sound of their native language to the pro- nunciation of a sound of a second language that is similar but not identical to their own. In general, language interference refers to the wrong application of knowledge from the native language to a second linguistic code. As we have seen, transfer differs from lexical borrowing in that, while borrowing does not presuppose that the user of a borrowed term is a bilingual speaker, phonetic interference implies a bilingual speaker insofar as it reflects the tentative application of knowledge from the native language to a second linguistic system. Here we are dealing with the transfer of a sound from a living language to a Macedonian sound, not of a word from a foreign dead language.

The phonetic interference hypothesis explains in a rather convincing way the random occurrence of the voiced plosives in Macedonian and agrees with the information that ancient sources give with respect to the fact that part of the Macedonian population did not speak Greek. The spellings B, $\Delta$, $\Gamma$ for $\Phi, \Theta, \mathrm{X}$ are particularly frequent in personal names. With the exception of Bepevík $\alpha$, spellings with $B, \Delta$ or $\Gamma$ do not appear in personal names for individuals of higher status, a fact that is in agreement with the generalization according to which Macedonian kings spoke Greek and reigned over non-Greeks. The phonetic interference hypothesis also accounts for the fact that what we really find are occasional spellings B, $\Delta, \Gamma$ instead of $\Phi, \Theta, \mathrm{X}$, but not the other way around, a fact that excludes the possibility of arguing for a merger between voiced and aspirates.

Ancient sources stress the use of Macedonian in excited and agitated states (see Plutarch, Alexander 51.6; Eumenes 14.11) or as a vehicle of familiar, friendly or affective interchange (see Ps.-Callisthenes 3.32) or as a mark of ethnic identity (see Diodorus Siculus 17.101.2). The use of the Macedonian dialect for such communicative functions points to its character as a low prestige variety in relation to the Attic-Ionic koine, which was used for formal communication from an early date. Such a situation closely reminds the pattern called diglossia, a situation that is said to occur in bilingual societies that use a higher variety of a linguistic code for formal communication and a lower variety for familiar and informal spheres of social interaction. ${ }^{36}$ Ancient sources also mention the unintelligibility of Macedonian (Curtius 6.9.34-6, 6.11.4), a feature that can be readily understood under the phonetic interference hypothesis.

36 In societies with two varieties of the same language, the high prestige variety is used in public and in formal communication, while the low prestige variety is generally confined to familiar, informal and private interchange (see Ferguson 1959). For diglossia in bilingual societies in which two unrelated languages are spoken cf. Fishman 1967.

37 For a pottery sherd inscribed with a trade letter in Carian, see SEG 48.847 (Mygdonia, Therme, 6th century BC).

38 Queen Cleopatra had full command of Macedonian (see Plutarch, Antonius 27.5).

## 10

Conclusion
The linguistic situation that emerges from the consideration of the documents found in the geographically multiform but politically unitary area of ancient Macedon is no more than a linguistic mosaic made up of local Greek dialects and probably also of at least one non-Greek Indo-European language, a linguistic adstratum, of which only a number of glosses and two or three phonetic features that probably point to Phrygian but also to Thracian may be hinted at in the documents always written in Greek. Other languages, such as Illyrian, are likely to have been spoken in the kingdom of Macedon, but they are neither preserved in documents nor mentioned by ancient literary works. ${ }^{37}$ A number of foreign personal names quoted in Greek texts also point to speakers of Phrygian, Thracian, and Illyrian.

The unidentified Indo-European language referred to above was probably still alive at the time of our first written documents in the 5th century BC. It was kept and persisted, at least while the impact of its interference on the pronunciation of Greek can be traced in the Greek texts. The local Greek dialects spoken in the city-states that were annexed to the Macedonian kingdom were progressively replaced by the Attic-Ionic koine for writing purposes, as well as for an increasing number of communicative functions since the middle of the 4 th century BC , at an earlier date than in other Greek areas. As the Attic-Ionic koine increased its communicative functions, the Macedonian dialect, which apparently was never used for writing public documents, ceased to be used for writing private documents as well. The Roman conquest of 168 BC probably accelerated the decadence of the local dialects and strengthened the usage of the Attic-Ionic koine. After becoming a Roman province, the local Greek dialects along with the unidentified Indo-European language went out of use and disappeared in a short lapse of time. The latest mention of the Macedonian dialect for spoken use dates from the beginning of our common era, when, as reported by Strabo (7.7.8), some (žviol) Macedonians were $\delta$ ́́ $\gamma \lambda \omega \tau \tau 0 \imath$ (i.e., speakers of koine and of the local dialect). ${ }^{38}$

# Ancient Macedonian as a Greek dialect: <br> A critical survey on recent work 

## 1

Introduction

1 For lack of space, epigraphical references will here be kept to a minimum (for more examples I refer to Panayotou's and Hatzopoulos' publications). I have to thank Alcorac Alonso Déniz for some interesting suggestions.

2 In some cases the glosses are standard Greek words that had a special meaning or, for some reason, were regarded as typically Macedonian (Sowa 2006, 117-18): cf. ß



3 Colvin $(1999,279)$ simply states that "our ignorance of the linguistic situation in Macedon remains almost complete".

The question of whether the language of ancient Macedonians was a Greek dialect or a different language has attracted considerable attention during the past three decades. Until recently, the idea that Ancient Macedonian was a separate Indo-European language more or less closely related to Greek, possibly a member of the Thraco-Phrygian branch (henceforth, the Thraco-Phrygian Hypothesis), dominated the academic scene, especially outside Greece. But in the last few years, this idea has increasingly receded to the persuasion that Macedonians spoke a Greek dialect (henceforth, the Greek Hypothesis), even though as early as the 4th century BC the Macedonian administration used in writing first Attic and then the Attic-Ionic koine, virtually to the complete exclusion of the vernacular (see Panayotou 2007a for a convenient survey). ${ }^{1}$

Several facts have been pointed out as evidence in support of the Greek Hypothesis:
a Some ancient sources state that the Macedonians were Greek and spoke a dialect similar to that of Aetolia and Epirus.
b Most of the Macedonian glosses transmitted by Hesychius are interpretable as Greek words with some distinctive phonetic peculiarities:
 $\delta o ́ v \omega v$ (AnGk $\theta \omega ́ \rho \alpha \xi$ 'trunk, chest'), $\delta \alpha v \tilde{\omega} v \cdot ~ к \alpha к о \pi о เ \tilde{\omega} v . ~ к \tau \varepsilon i ́ v \omega v ~(p o s-~$ sibly * $\theta \alpha v o ́ \omega=$ AnGk $\theta \alpha v \alpha \tau o ́ \omega ;$ cf. Maced. $\delta \alpha ́ v o s ~ f o r ~ A n G k ~ Ө \alpha ́ v \alpha \tau o \varsigma ~ a c-~$ cording to Plutarch, Moralia 2.22c), үó $\alpha \alpha$ ( үó $\alpha \alpha$ ms.). そ̌v vep $\alpha$ (possibly for

c The overwhelming majority of the Macedonians bore Greek names:

d A few and, for the most part, short inscriptions attest to a variety of Greek close to Doric. The longest texts are the famous curse tablet of Pella (henceforth, Pella; see Appendix, p. 287), ca. 380-350 BC (SEG 43.434; cf. Voutiras 1993, 1996, 1998; Dubois 1995) and a consultation to the oracle of Zeus at Dodona (henceforth, DODONA) which might be of Macedonian origin (see 5.2 below).
e Last but not least, Anna Panayotou and Miltiades Hatzopoulos have painstakingly searched the Macedonian inscriptions written in Attic or in the Attic-Ionic koine and have identified several features that they ascribe to a Macedonian substrate.
In spite of this, the Greek Hypothesis has not yet achieved universal recognition. To mention just some recent disbelievers, Colvin $(2007,2010)$ does not even bring up the issue, ${ }^{3}$ Adrados (2005,36-7) expresses some reservations on
the problem and suspends judgement until further information is available to us, Horrocks (2010, 79 with 122, fn. 1) hesitates between "a highly aberrant Greek dialect or an Indo-European dialect very closely related to Greek".

In this paper I intend to offer a critical appraisal of the linguistic evidence that has been produced in recent years in favor of and against the Greek Hypothesis.

## 2

The PIE plosive consonants in Macedonian
At the root of the Macedonian question lies the problem of the outcomes in (general) Greek and in Macedonian of the IE consonants traditionally reconstructed as voiced aspirated stops $\left({ }^{*} b^{h}, * d^{h},{ }^{*} g^{h}\right) .{ }^{4}$ Uncontroversially, PIE ${ }^{*} b^{h}$, * $d^{h},{ }^{*} g^{h}$ evolved in Greek into voiceless aspirates / $\mathrm{p}^{\mathrm{h}} \mathrm{t}^{\mathrm{h}} \mathrm{k}^{\mathrm{h}} /$ (written $\Phi, \Theta, \mathrm{X}$ ). According to the proponents of the Thraco-Phrygian Hypothesis, in Macedonian, like in Thraco-Phrygian and in many other IE branches, ${ }^{*} b^{h}, * d^{h}, * g^{h}$ became voiced stops $/ \mathrm{b} \mathrm{dg} /$ (written $B, \Delta, \Gamma$ ). Thus, Greek devoicing and Macedonian deaspiration were believed to account for the contrast between, e.g., Att. Фع $\rho$ vvík vs. Maced. Bepevík (Atticized as Bepevíkๆ) (< PIE *bher-), Att. $\Phi \alpha ́ \lambda \alpha k \rho \circ \varsigma$ vs. Maced. Bó $\lambda \alpha к \rho \circ \varsigma$ (Att. $\varphi \alpha \lambda \alpha k \rho o ́ \varsigma ~ ‘ b a l d ’), ~ A t t . ~ \Phi u \lambda о \mu \alpha ́ \chi \eta ~ v s . ~$ Maced. Bou $\lambda_{0} \mu \alpha ́ \gamma \alpha\left(\varphi \bar{\nu} \lambda_{0-} \text { < PIE * } b^{h} h_{2} u-s l-\right)^{5}$ or the above-mentioned $\theta \dot{\omega} \rho \alpha \xi$ vs. Maced. $\delta \omega ́ \rho \alpha \xi$.

In all probability, the Thraco-Phrygian Hypothesis is just a misconception. My starting point will be Hatzopoulos' (2007a) essay, ${ }^{6}$ which is the most thoroughly detailed and developed presentation of the Greek Hypothesis to date. This outstanding contribution is the culmination of almost two decades of uninterrupted research on Macedonian consonantism (see Hatzopoulos 1987a, 1998, 1999), and builds on previous proposals by two prominent Greek scholars, namely Hatzidakis $(1896,1911)$ and Babiniotis $(1992 a, 1992 b)$. Hatzopoulos argues that a non-Greek deaspiration of PIE ${ }^{*} b^{h},{ }^{*} d^{h},{ }^{*} g^{h}>/ b \mathrm{dg} /$ does not account satisfactorily for the difference between mainstream Greek and Macedonian, since inscriptional evidence proves beyond doubt that the PIE plain stops *p, *t, *k also underwent voicing: cf. e.g., "Apte $\mu ı \varsigma \Delta \downarrow \alpha i ́ \alpha ~ \varepsilon ̉ v ~ B \lambda \alpha \gamma \alpha ́ v o l \varsigma ~(=~$



The consonantism of Macedonian vis-à-vis mainstream Greek is best explained as resulting from an inner-Greek Lautverschiebung that can be represented as follows: ${ }^{10}$

4 The controversial question of whether the PIE mediae were actually voiced aspirates or not need not concern us here.

5 Name of a Macedonian woman who made several offerings at Delos (IG 11.2.161B.102, 186.5, etc., ca. 278 BC ).

6 Hatzopoulos presented his essay as a paper in the 4th Conference on Ancient Greek Dialectology held in Berlin in September 2001 and submitted it for publication early in 2002, but the proceedings of the conference were not published until 2007.
 $37.590,2-3$, Aegae, 189 AD). Hatzopoulos relates the place name *B $\lambda \alpha \dot{\gamma} \alpha v \alpha$ and the epithet $B \lambda \alpha \gamma \alpha v i ̃ \tau<\varsigma$ to the gloss $\beta \lambda \alpha \chi \alpha \alpha v \cdot \delta \dot{\alpha} \alpha \dot{\tau} \rho \alpha \chi \circ \varsigma$ (Hesychius). Curiously enough, Plutarch (Moralia 292e 4-8 [= Quaestiones Graecae]), the first ancient source reporting on the Macedonian feature, seems to imply that, unlike Delphians, Macedonians did not voice $/ \mathrm{p}$ / (and the other voiceless stops): oủ $\gamma \dot{\alpha} \rho \alpha ̉ v \tau i ̀ ~ \tau o v ̃ ~ \varphi ~ \tau \tilde{\varphi} \beta \chi \rho \tilde{\omega} v \tau \alpha \_\Delta \varepsilon \lambda \varphi o i ́$,

 ү $\alpha$ р tò $\pi \alpha \tau \varepsilon$ г̃v " " $\alpha \tau \varepsilon$ च̃v" k $\alpha$ tò тıкрòv "ßıкрòv" غ̇ $\pi เ \varepsilon เ \kappa \tilde{\omega} \zeta \kappa \alpha \lambda 0 \tilde{u} \sigma \iota v$ ("For Delphians do not use $B$ for $\Phi$ (as Macedonians do when they say
 Ф人́ $\lambda \alpha к \rho о \varsigma$ and Фероvík $]$ ], but for $\Pi$; for they [i.e., Delphians] naturally pronounce $\pi \alpha \tau \varepsilon \tau$


8 This PN in an Athenian treaty with Perdiccas II of Macedonia and Arrhabaeus of Lyncestae (IG 3.89.72, 423/2 BC?) is a hapax. The form Портĩvos occurs in Thessaly.

9 Cf. $\Delta \rho \varepsilon \beta \varepsilon \lambda \alpha ́ o u$ (SEG 55.600.2, Doliche [northern Thessaly], 3rd c. BC).

10 It is difficult to ascertain whether $/ \mathrm{p}^{\mathrm{h}} /$ and $/ \mathrm{b} /$ spirantized to bilabial $[\varphi]$ and $[\beta]$ or evolved one step further into labiodental [f] and [v]. For convenience, I use [f] and [v] all throughout this paper. For similar reasons, it remains uncertain whether the outcome of the spirantization of / d/ was denti-alveolar like in Spanish or interdental like in Modern Greek.

| PIE | General Greek |  |  | Macedonian |
| :---: | :---: | :---: | :---: | :---: |
| ${ }^{*} \mathrm{p},{ }^{*} \mathrm{t},{ }^{*} \mathrm{k}$ | /ptk/ | (п T K) | > | $/ \mathrm{ptk} /\left(\begin{array}{\|c}\text { т }\end{array}\right) \sim[\mathrm{b} \mathrm{d} \mathrm{g]}(\mathrm{~B} \Delta \Gamma)$ |
| ${ }^{*} b^{h},{ }^{*} d^{h},{ }^{*} g^{h}$ | $/ p^{h} t^{h} k^{h} /(/ f \theta x /$ in some dialects) | $(\Phi \ominus x)$ | > | $/ f \theta x /(\Phi \ominus x) \sim[v ð \gamma](B \Delta r)$ |
| *b, *d, *g | $/ \mathrm{bdg} /(\sim[\beta$ d $\gamma]$ in some contexts) | (B $\Delta$ г $)$ | > | $/ \mathrm{bdg} /(\mathrm{B} \Delta \Gamma) \sim[v ð \gamma](\mathrm{B} \Delta \Gamma)$ |

The date of the Macedonian voicing is uncertain, but there is evidence of it in inscriptions dated to the 5th and 4th centuries BC : cf. aforementioned Bop $\delta i ̃ v o \varsigma, ~ B \varepsilon \rho \varepsilon v v \omega ́ ~(S E G ~ 35.775, ~ A e g a e, ~ c a . ~ 350 ~ B C) ~ a n d ~ \delta \alpha \pi i ̄ v \alpha ́ ~ p o s s i b l y ~ f o r ~$ $\tau \alpha \pi \varepsilon ו v \alpha ́ ~ i n ~ P E L L A, ~ l . ~ 6(D u b o i s ~ 1995, ~ 195-6) . ~ T h e ~ f o l l o w i n g ~ f e w ~ r e m a r k s ~ c o m p l e-~$ ment Hatzopoulos’ (2007a) views.

Contrary to the prevalent opinion, I am persuaded that, in the most favorable contexts, the spirantization of the aspirates and voiced stops was already under way in the classical period in some, if not most of the ancient Greek dialects: i.e., $\lambda \alpha ́ \theta$ os, tóס $\varepsilon$ were pronounced with fricatives ([láӨos], [tóðe]) as

11 Curiously enough, the adherents of the "New Sound of Attic" (i.e. Teodorsson 1974 and his epigones) tend to imagine a somewhat schizophrenic dialect that is extremely innovative as regards vocalism and extremely conservative as regards consonantism.

12 Several years ago I had the opportunity to discuss some of these issues with Hatzopoulos (see Hatzopoulos 1999, 235; 2007a, 162, 165, fn. 1). I bring them up here again for a more detailed and comprehensive overview.

13 The contexts for voicing may vary slightly from one language to another. Similar phonetic processes operated in other Romance languages. Note that Lat. $f->$ Sp. $h->\varnothing$-: Lat. fata $>$ MnSp. hada ['aða] 'fairy'.

14 The relevant generalization is that spirantization is blocked by any preceding homorganic oral occlusion: cf. robot débil [ro'ßod'de $\beta i 1]$ 'weak robot' (as against voz débil ['bo(ð)'ðeßil] 'feeble voice’ or abad débil [a'ba(ð)'ðeßil] 'weak abbot’).

15 I thank Alcorac Alonso Déniz, a native of Las Palmas de Gran Canaria, for some first-hand information on Canarian voicing.

16 Generally speaking, other things being equal, consonants are more resistant to lenition in word-initial position than in word-internal position, but this rule of thumb knows of some glaring, not fully understood exceptions: cf. Lat. pacem > Basque pake / bake 'peace' (Michelena 1977, 238-40, 529ff.).

17 Cf. 'A $\mu$ ßí ${ }^{\prime}$ оү $\omega$, IG 9.2.325B.6, Aeginion (Thessaly, mod. Kalambaka), Roman period.

18 Obviously, assimilation in $\Sigma \tau \alpha \delta \mu^{\circ}$ involves only voicing as against $\gamma \rho \alpha ́ \mu \mu \alpha, \dot{\alpha} \varphi \tilde{\varphi} \gamma \mu \alpha \_$ which include spreading of nasality.

19 Cf. Hatzopoulos 1991, 38-43, no 7.5, Amphipolis, after 357 BC .
in Modern Greek (for the early spirantization of /b dg/ in Ancient Greek, cf. Méndez Dosuna 1991-3; 2009, 82-4). ${ }^{11}$ Macedonian was in this respect no exception to a general trend in the phonetic evolution of Ancient Greek.

The Greek Hypothesis is typologically cogent. ${ }^{12}$ Admittedly, the case of Macedonian is exceptional as far as the history of Greek consonantism is concerned, where we see that voicing is confined to postnasal position: cf. AnGk $\pi \varepsilon ́ v \tau \varepsilon$ [pénte] > MnGk ['pe(n)de]. But voicing of stops and fricatives in intersonorant contexts ( $\mathrm{V} \_\mathrm{V}, \mathrm{R} \_\mathrm{V}, \mathrm{V} \_\mathrm{R}$ ) is a widespread assimilatory phenomenon in the languages of the world. An illustrative example is the case of Latin stops in Spanish: cf. AnGk k $\alpha \tau \alpha ́ \sim$ VLat. cata > ['kada] > MnSp. cada ['kaða] 'every'; Lat. patre $(m)>$ ['padre] > MnSp. padre ['paðre] 'father'; AnGk $\Sigma \tau \varepsilon ́ \varepsilon \varphi \alpha v o \varsigma>$ Lat. Stephanus $(p h=[f])>$ MnSp. Esteban [es'teßan] ‘Stephen', AnGk pó́ $\varphi \alpha v o \varsigma>$ Lat. raphanus > MnSp. rábano ['raßano] 'radish', Lat. defensa $(m)>$ Sp. (dial.) devesa 'hacienda' (standard dehesa), Lat. trifoliu(m) > Sp. trébol ['treßol] 'clover'. ${ }^{13}$ By contrast, stops remained voiceless in word-initial position (Lat. patrem > Sp. padre) and after a consonant: partem > parte 'part', altum > alto 'high', symphonia (VLat. *sumponia) >Sp.zampoña 'rustic pipe, syrinx', Gallician zanfoña 'hurdy-gurdy'. Crucially, unlike Modern Greek /vð $\gamma /$, which are full-fledged phonemes (e.g., סív $\omega$ /'ðino/ 'I give' vs. v $\tau$ úv $\omega$ /'dino/ 'I dress'), Modern Spanish fricative (or approximant) [ $\beta$ б $\gamma$ ] are mere context-dependent allophones of /b dg/, e.g., dios ['djos] 'god' after a pause, el dios [el'djos] 'the god' or un dios ['un'djos] 'a god' but la diosa [la'ðjosa] 'the goddess', a Dios [a'ðjos] 'to God' and por Dios [por'ðjos] 'by God'. ${ }^{14}$

A second wave of voicing is currently spreading across various modern Spanish dialects. The changes documented in the Spanish spoken in Canary Islands may shed some light on Ancient Macedonian. In Canarian Spanish voicing affects stops and affricate [ t$]$ ]: pata ['pada] 'leg (of an animal)', muchacho [mu'dzadzo] 'boy' (standard ['pata], [mu'tfatfo]). The process is context-dependent, thus / p / in pata is voiceless after a pause but voiced after a vowel in sandhi, e.g., la pata [la'bada]. Spirantization has begun to spread to the outcomes of the voicing of/ptk/ so that la pata [la'bada] or [la' $\beta \mathrm{a}$ (a] 'the leg' and la bata [la' $\beta a d a]$ or [la' $\beta a ð a$ ] 'the robe' may be homophonous with lavada [la' $\beta a ð a$ ]


The inscriptional data suggest that voicing in Ancient Macedonian may have operated very much in a similar way. On the other hand, a language with voiced obstruents but no voiceless counterparts would be a typological rarity. For this reason, context-free general voicing /ptk/ >/bdg/,/f $\theta \mathrm{x} / \mathrm{>} / \mathrm{v} \partial \mathrm{\gamma} /$ in Macedonian is unlikely. Like in Canarian Spanish, voicing is abundantly attested in word-initial position. Arguably, voicing of word-initial consonants resulted from the generalization of a sandhi-variant, ${ }^{16}$ e.g., $\dot{\alpha}$ Фعрعvík $\alpha$, ó T $\rho \varepsilon \beta \varepsilon ́ \lambda \alpha o \varsigma ~ p r o n o u n c e d ~ a s ~[h a: v e r e n i ́ k a:], ~[h o d r e v e ́ l a: o s]) ; ~ f o r ~ v o i c i n g ~ a f t e r ~ s o-~$
 name $\Xi \alpha v \delta$ ıкóৎ ( < $\Xi \alpha v \theta$ ıкóৎ). ${ }^{17}$ Hatzopoulos (1999, 239; 2007a, 165, 170) cites some instances of aspirates voiced before a nasal (e.g., $\Sigma \tau \alpha \delta \mu \varepsilon i^{\prime} \alpha,, \Sigma \tau \alpha \delta \mu \varepsilon ́ \alpha \varsigma$, for $\Sigma \tau \alpha \theta \mu \varepsilon ́ \alpha \varsigma)$, but these might fall under the rubric of assimilation of sylla-ble-final stops to a following /m/: cf. *үр́́ $\varphi \mu \alpha>\gamma \rho \alpha ́ \mu \mu \alpha, * \alpha \dot{\alpha} \varphi \tilde{\kappa}-\mu \alpha 1>$ Hom. $\dot{\alpha} \varphi \tilde{\imath} \gamma \mu \alpha \mathrm{l}$ (probably [aphî:ymai]). ${ }^{18}$

It has been repeatedly argued by the proponents of the Thraco-Phrygian Hypothesis that consonant voicing in Macedonian is a feature restricted to PNs and place names and that, even in the realm of onomastics, voicing is irregular and even exceptional. Neither of these two arguments is cogent.

On the one hand, voicing is documented in words other than PNs in PELLA ( $\delta \alpha \pi \bar{\imath} v \alpha$ for $\tau \alpha \pi \varepsilon เ v \alpha ́)$ and in texts written in Attic or in Koine (e.g., úßó for ú $\tau$ ó or hypercorrect $\beta \varepsilon \varphi \alpha i ́ \omega \varsigma$ for $\beta \varepsilon \beta \alpha i ́ \omega \varsigma),{ }^{19}$ as well as in Hesychius' Macedonian glosses.

As for the second point of criticism，Hatzopoulos（2007a，171）observes that voicing is attested only in a reduced area of Lower Macedonia，Bottiaea and Pieria．The isogloss penetrates into northern Thessaly（Perrhaebia，northern Pelasgiotis）．

Dialect mixture－combined with synchronic variation－can account for the irregularity of voicing．For instance，Latin $-p-,-t-,-k-$ are occasionally voiced to Italian $-v-,-d-,-g$－（Rohlfs 1966，§194，199，205）：VLat．＊pauperum＞MnIt． povero＇poor＇，Lat．episcopum＞vescovo＇bishop＇as against Lat．nepotem＞MnIt． nipote＇grandson＇，Lat．apem＞MnIt．ape＇bee＇；Lat．patrem＞MnIt．padre＇father＇， Lat．strata＞MnIt．strada＇street＇as against Lat．pratum＞MnIt．prato＇meadow＇， Lat．vitam＞vita＇life＇；Lat．spicam＞spiga＇ear of corn＇，Lat．pacare＞MnIt．pagare ＇to pay＇as against Lat．urticam＞MnIt．ortica＇thizzle＇，Lat．amicum＞MnIt．ami－ co＇friend＇．Tuscany，the region where the modern standard originally devel－ oped，was crucially a buffer zone between voicing northern Italian dialects and non－voicing southern Italian dialects．

In a pioneering paper，Tzitzilis（2008）tries to identify some possible rem－ of Upper Pieria．Thus，he plausibly traces the dialectal word $\varphi \rho \circ$ út $\alpha$＇knitted decorations in the border of a garment＇back to AnMaced．＊$\varphi \varphi \rho \tilde{\varphi} \varsigma$－$\tilde{v} \tau o \varsigma ~ ' e y e-~$ brow＇（cf．Hsch．$\dot{\beta} \beta \rho о \tilde{\tau} \tau \varepsilon \varsigma$ ỏ $\varphi \rho \tilde{\varepsilon} \varepsilon \varsigma$. M $\alpha \kappa \varepsilon \delta o ́ v \varepsilon \varsigma)$ ，a cognate of Att．ỏ $\varphi \rho \tilde{v} \varsigma$－v́oৎ＜ $\left.{ }^{*} h_{3} b^{h} r(e) u H-\right) .{ }^{20}$ This seems to confirm the existence of two Macedonian varie－ ties，one with voicing（＊$\dot{\alpha} \beta \rho \tilde{\varphi} \varsigma)$ and another one without voicing（ $\left.{ }^{*} \dot{\alpha} \varphi \rho \tilde{\rho} \varsigma\right)$ ．

As it regards the evolution of ${ }^{*} b^{h},{ }^{*} d^{h},{ }^{*} g^{h}$ ，Hatzopoulos $(2007 a, 172)$ makes two pertinent remarks：
a Voiceless K－in the PN K\＆$\beta \alpha \lambda$ ĩvos（Att．Kદ $\varphi \alpha \lambda \tilde{\mathrm{i} v o \varsigma) ~ i s ~ i n c o m p a t i b l e ~ w i t h ~}$ the Thraco－Phrygian Hypothesis，according to which we should expect
 application of two Pan－Hellenic phonetic processes，namely devoicing of ${ }^{*} b^{h},{ }^{*} d^{h},{ }^{*} g^{h}$ and deaspiration（Grassmann＇s Law），i．e．，＊$g^{h} e b^{h_{-}}>$Proto－ Gk＊k ${ }^{h}$ ephal－＞Gk［kep ${ }^{h}$ al－$](\kappa \varepsilon \varphi \alpha \lambda-)>[$ kefal－$](\kappa \varepsilon \varphi \alpha \lambda-)>$ Maced．［keval－］ （ $\kappa \varepsilon \beta \alpha \lambda$－）．${ }^{22}$
b The PN Bé $\tau \tau \alpha \lambda$ os looks like a local variant of the ethnic Att．Өevt $\alpha \lambda$ ó $\varsigma$ ， Boeot．Фعт兀 $\lambda$ ós，Thess．Пعг $\theta \alpha \lambda$ óऽ，whose etymon must have had an initial aspirate labiovelar ${ }^{*} g^{w h}$ ．The Thraco－Phrygian Hypothesis would have in Macedonian an outcome with＊Гع－．В $\varepsilon$ ѓ $\tau \alpha \lambda \circ \varsigma$ must be the result of a development ${ }^{*} g^{w h} e>*^{*} k^{w h} e>\left[p^{\mathrm{h}} e\right]>[\mathrm{fe}]>[\mathrm{ve}]$ ，with a shift $K^{w} e>P e$ ，a typical feature of Aeolic．${ }^{23}$ Interestingly，Tzitzilis（op． cit．，239－40）has gathered evidence of the intensifying prefix $\pi \alpha \tau \rho o{ }^{2}-$ in present－day dialects of Upper Pieria，which corresponds to stand－ ard $\tau \varepsilon \tau \rho \alpha-$（cf．MnGk $\tau \varepsilon \tau \rho \alpha ́ \xi \alpha v \theta o \varsigma ~ ‘ v e r y ~ b l o n d ’),{ }^{24}$ e．g．，$\pi \alpha \tau \rho \alpha ́ \gamma \gamma \circ u \lambda o u \varsigma$
 $\pi \alpha \tau \rho о ү$ v́viка＇virago’．Tzitzilis traces $\pi \alpha \tau \rho \circ$－back to Ancient Thessal－ ian $\pi \varepsilon \tau \rho \circ-\left(<^{*} k^{w}\right.$ etr－$)$ ，which could be either a loan from Thessalian to Macedonian or a vernacular variant attested in an area within Ancient Macedonian that shares two Aeolian features，namely $k^{w} e>\pi \varepsilon$ and ${ }^{*} r$ $>0 \rho / \rho o$ ．
Panayotou and Brixhe have devoted several papers to the question of Mac－ edonian consonantism（Brixhe \＆Panayotou 1988，1994b；Brixhe 1999；Pan－ nayotou 2007a，439）．Brixhe（1999）criticizes the Greek Hypothesis with spe－ cious arguments（see Hatzopoulos 2007a for a detailed response）．Panayotou and Brixhe are of the opinion that PNs like Bepevíkn or Kєß $К \lambda$ ĩvos are the residue in onomastics of a Thraco－Phrygian tribe that was assimilated by the Macedonians，but this explanation is unlikely．As indicated above，voicing is neither exclusive to PNs，nor to the PIE aspirates．${ }^{25}$

20 Tzitzilis notes that $\varphi \rho o u ́ \tau \alpha$ confirms the accuracy of Hesychius＇$\dot{\alpha} \beta \rho о \tilde{\tau} \tau \varepsilon \varsigma$ ，which is fre－ quently corrected to $\dot{\alpha} \beta \rho \circ \tilde{\sim} f \varepsilon \varsigma$ ．An entry ${ }^{\circ} \beta \rho \circ \tau \varepsilon \varsigma$ ． ỏ $\varphi$ рúeऽ has been interpolated from Cyrillus＇lexi－ con into Hesychius＇glossary．The $\alpha / 0$ variation in the initial vowel is problematic．Are AnGk ó－ and Maced．$\dot{\alpha}$－different outcomes of PIE $h_{3}$－？This is unlikely．Sowa $(2007,177-8)$ toys with the idea of a change $/ 0 />/ \mathrm{a} /$ ，which could account for the $\dot{\alpha}$－of $\dot{\alpha} \beta \rho \circ \tilde{\tau} \tau \varepsilon \varsigma$ and of Hesychius＇Macedoni－ an gloss $\alpha \not \lambda \imath \zeta \alpha \cdot \lambda \varepsilon u ́ k \eta ~ t o ̀ ~ \delta \varepsilon ́ v \delta \rho o v ~ ' w h i t e ~ p o p l a r ' ~$ （the ms．has $\lambda \varepsilon$ úk $\eta \tau \tilde{\omega} v \delta \varepsilon v \delta \rho \tilde{\omega} v$＇leprosy of the trees＇），which Sowa connects with the Thessal－ ian place name＇ $0 \lambda_{1} \zeta \omega \dot{\omega} v$＇white poplar grove＇and with ỏ $\lambda i ́ \zeta \omega v$（i．e．，ó $\lambda \varepsilon i ́ \zeta \omega v$ ）．But this etymology is doubtful and，as Sowa himself acknowledges，the conditions of the change $/ 0 />/ a /$ are unclear． Alternatively，Maced．$\dot{\alpha} \varphi \rho$ ט́s could be explained as a back－formation from contracted $\frac{\dot{\alpha}}{\varphi} \rho \rho u^{\rho}$ ， （＜$\dot{\alpha}$ ó $\varphi \rho \nu^{\prime}$ ）；cf．MnGk $\alpha \cup \gamma$ ó＇egg＇formed after $\tau \dot{\alpha}$ $\alpha \cup \gamma \alpha ́$ ，which arose through a false reanalysis of contracted $\tau \alpha u ̛ \gamma \alpha ́[$ ta＇vya $<$［taưㄱya］＜［taưa $]$＜ ［taóa］＜AnGk $\tau \dot{\alpha}(\varphi \dot{\omega} \alpha ́)$.

21 of course，the as yet unattest－ ed ${ }^{*} \Gamma \varepsilon \beta \alpha \lambda$ ivvos could be a voiced variant of $K \varepsilon \beta \alpha \lambda i v o c$ ．

22 Grassmann＇s Law operated only after the PIE aspirates became voiceless．The change prob－ ably postdates Mycenaean（Lejeune 1972，57）， cf． ．chós（Myc．te－o［thehós］）＞$\theta$ cóc．An earlier date should have us expect an evolution $\theta$ हhó $\gg$ $\dagger \tau \varepsilon h o ́ \varsigma>\dagger \tau \varepsilon o ́ \varsigma$.

23 Bérta $\lambda$ os might be a loan from Thes－ salian（the difference between Thess．$-\tau \theta-\left[\mathrm{t} \mathrm{t}^{\mathrm{h}}\right]$ and Maced．$-\tau \tau$－$[\mathrm{tt}]$ is negligible）．Hatzopoulos＇ （2007a，173）claim that Фと́ $\tau \tau \alpha \lambda$ oৎ，the forebear of Maced．Bé $\tau \tau \alpha$ 入os，is to be situated at a post－Myc－ enaean date is not compelling．Admittedly，$k^{w}$ ， $g^{w}, g^{w h}$ are still represented with special syllabo－ grams（the $q$－series）in Linear $B$ ，but the merger of labiovelars and labials might have taken place at an earlier date in Proto－Aeolian．

24 Cf．тєтра́ $\gamma$ you $\rho o v$＇large cucumber＇ （Herodianus，Suda）．

25 Brixhe $(2010,65)$ has toned down his former claims and speaks in more general terms of an＂areal feature＂．

26 The spelling＜ot＞possibly stands for ［st $\left.{ }^{\mathrm{h}}\right]$ ．Aspirate $/ \mathrm{t}^{\mathrm{h}} /$ had undergone spirantization except in the position after $/ \mathrm{s} /$ ，so that $\Theta$ ，now representing fricative $/ \theta /$ ，was no more a suit－ able spelling for［st $\left.{ }^{\mathrm{h}}\right]$ clusters（Lejeune 1972，47， fn．7；110，fn．8；Méndez Dosuna 1985，333－94）．

27 Gemination in heterosyllabic $C . w$ and $C . j$ clusters is not the effect of a strengthening of articulation，but of partial resyllabification（cf．
 see Méndez Dosuna 1994）．For gemination with ［w］preserved，cf．Lat．aqua＞It．acqua［＇ak．kwa］． 28 Мєб弓орíøк （SEG 49．846．2，2nd c． BC），M $\_\zeta \omega$ рí $\kappa \omega \omega$（SEG 49．847，2nd／1st c．BC）， ［Mعб］\}opí[бк $]$ ］（SEG 49．849．2－3，ca．1st c．BC）， ［Mعбک］$\omega$ рíø $\kappa \omega$（SEG 49．850．1，ca．150－200 AD）， M $\varepsilon \sigma[\zeta о \rho i ́ \sigma \kappa \omega$ ］（SEG 49．851．1，ca．150－200 AD）．The reading Mعбו pıбкoç of the first editor，adopted by the SEG，is demonstrably false．

29 This meaning would correspond closely to that of $\mu \varepsilon$ бббороऽ＇intermediate boundary－ stone＇in Tab．Heracl．1．63， 69.

In a recent article，O＇Neil $(2006,205)$ concludes that Ancient Macedonian preserved the original voiced pronunciation of PIE aspirate plosives．

He says：
The fact that Macedonians seem to have represented these sounds by both voiced and aspirated stops from the earliest recorded times，should be taken to show that they heard them as something distinct from both the voiced stops and the stand－ ard Greek aspirates．Macedonians still kept the voiced aspirates as separate pho－ nemes from the voiced plosives preserving the original PIE voiced pronunciation， but these were heard by other Greeks as voiced plosives．

O＇Neil＇s proposal is unacceptable on several counts：
$a$ The preservation of the＂original＂pronunciation of PIE ${ }^{*} b^{h}, * d^{h},{ }^{*} g^{h}$ is unlikely since aspirate voiced stops are only attested in Indian．
$b$ If the hypothetical voiced aspirates $/ b^{h} d^{h} \mathrm{~g}^{\mathrm{h}} /$ had been distinct pho－ nemes in Macedonian，native speakers should have had no trouble with spelling．As to how non－Macedonian Greeks might have heard these consonants，it is irrelevant to the issue under discussion．
c O＇Neil＇s theory is incapable of accounting for the spelling $\tau$ in $\gamma \varepsilon v \varepsilon ́ \sigma \tau \alpha 1$ （Att．$\gamma \varepsilon v \varepsilon ́ \sigma \theta \alpha l$ ）in PELLA l．8．A hypothetical value $/ \mathrm{d}^{\mathrm{h}} /$ should have been represented either as $\gamma \varepsilon v \varepsilon ́ \sigma \theta \alpha l$（aspiration）or as＊$\gamma \varepsilon v \varepsilon ́ \sigma \delta \alpha l$／${ }^{*} \gamma \varepsilon v \varepsilon ́ \zeta \alpha l$ （voice）．${ }^{26}$
d O＇Neil does not take account of the voicing of plain stops in，e．g．，$\Delta$ ry $\alpha$ í $\alpha$ for $\Delta ı \alpha i^{\alpha} \alpha, \delta \alpha \pi \bar{\imath} v \alpha ́$ for $\tau \alpha \pi \varepsilon \imath v \alpha ́, ~ e t c . ~$

3
Other phenomena concerning the consonantism of Ancient Macedonian

Hatzopoulos（2007b）explores the evolution of labiovelars in Ancient Mace－ donian．He tentatively suggests that the PN ’Éóкı $\lambda \lambda$ 人оऽ（＜＊$h_{3} e k^{w-}$ ）attests to a shift $k^{w} i>\left[\mathrm{k}^{\mathrm{j} i}\right]>k \mathrm{k}$ ．Purportedly，this is an isogloss shared with Thessalian，cf． ${ }^{*} k^{w}$ is＞kıৎ（Att．$\left.\tau 1 \varsigma\right)$ in Eastern Thessalian（Pelasgiotis）．However，the evidence of one single PN is not sufficient．Moreover，both／k／in EThess．kı̧ and／t／in WThess．（Thessaliotis）$\tau \iota \varsigma$ are irregular outcomes（for expected＊$\pi \iota \varsigma$ ）that are probably due to a deviant phonetic evolution typical of grammatical words．

On the basis of the PNs＇Ікко́та，＇Ікко́тıцоऽ（＜＊h $h_{1}$ ek＇wo－），＂Оккоऽ（＜＊h $h_{3}$ ekw－） and $\Lambda$ иккпía（a derivate of＊$\Lambda$ úккоऽ＜＊luk ${ }^{w_{-}}$），Hatzopoulos tentatively pos－ its an evolution ${ }^{*} k^{w_{O}}>$ кко in Macedonian，with a reinforcement of occlusion allegedly triggered by the loss of the labial appendix．However，such an in－ terpretation is unwarranted．${ }^{27}$ On the one hand，ï íтоऽ／ïккоц remains a co－ nundrum in Greek phonology with its unexpected aspiration， l －vocalism and geminate $-\pi \pi-/-\kappa \kappa$－At any rate，geminate $-\pi \pi-$／－кк－－whatever their expla－ nation－are pan－Hellenic．As for＂Оккоц and $\Lambda \cup к к \eta i ́ \alpha, ~ e x p r e s s i v e ~ g e m i n a t i o n, ~$ a commonplace phenomenon in PNs ，is a more convincing alternative．

Hatzopoulos notes that the place name Bá $\tau \tau \cup v \alpha$（possibly related to $\beta \tilde{\alpha} \sigma \sigma \alpha /$ $\beta \tilde{\eta} \sigma \sigma \alpha)$ and to the afore－mentioned Bé $\tau \tau \alpha$ 入os seems to indicate that PrGk $-t^{h} j$－ evolved into Maced．$-\tau \tau$－．In some dedications found in Apollo＇s sanctuary at Xerolimni of Kozani the god is called $\mathrm{M} \varepsilon(\sigma) \zeta \omega$ рíбкoऽ／ $\mathrm{M} \varepsilon(\sigma) \zeta_{0}$ рíбкoऽ．${ }^{28}$ Hat－ zopoulos plausibly interprets this epiklesis as a derivate of a compound of
 dle of the mountains＇（alternatively $\mu$ ह́б（ $\sigma$ ）o－＋őpo＜＊worwo－＇an intermedi－ ate boundary＇）．${ }^{29}$ On this basis，Hatzopoulos postulates an evolution－tj－＞－tj－＞ $-t^{\text {s }}$＞－tt－shared with Boeotian．He is of the opinion that the spelling $\zeta$ in $\mathrm{M} \varepsilon(\sigma)$ $\zeta \omega$ рíбкоৎ／M $\varepsilon(\sigma) \zeta$ орíбко corresponds to an intermediate stage－$t^{\text {s．}}$－．

However，Hatzopoulos＇claims are problematic on several counts：
a A perseveratory assimilation - $t^{\text {s- }}$ >- $t t$ - lacks phonetic plausibility (Méndez Dosuna 1991-3), whereas depalatalization (fronting) - $t^{j t j_{-}}>-t t-$ is more likely.
b To the best of my knowledge, the spelling $\zeta$ for the outcome of *thj occurs exclusively in archaic Cretan inscriptions (7th-6th centuries BC),
 over, the sigma in the spelling $\sigma \zeta$ remains unexplained: is Hatzopoulos thinking of a hybrid of $\langle\zeta\rangle$ and $<\sigma>$ ? Provisionally I prefer to interpret the spellings $\zeta, \sigma \zeta$ in terms of a voicing process ( $[-s-]>[-z-]$ ), which is consistent both with the voicing of the other fricatives $/ \mathrm{f} \theta \mathrm{x} /$ and with the evidence found in inscriptions (cf. $\Delta$ ıovv̧́ıo̧ for $\Delta$ ıovú zopoulos 1991, 38-43, no 7.19, Amphipolis, after 357 BC) $)^{31}$ and in Hesy-

c Pace Hatzopoulos, $-\tau \tau$ - in Maced. Bé $\tau \tau \alpha \lambda$ os and Boeot. $\Phi \varepsilon \tau \tau \alpha \lambda$ ós is no incontestable proof of any close relationship between Macedonian and Boeotian. The coincidence is simply accidental.
d Finally, Hatzopoulos's idea, inspired by Brixhe, that $-\tau \tau$ - is an archaizing feature of Macedonian is misguided. Arguably, depalatalization - $t_{i t j_{-}}$ >-tt--or, for the sake of the argument, perseveratory assimilation [ $\mathrm{tt}^{\mathrm{s}}$ ] $>[\mathrm{tt}]$ - appears just as innovative vis-à-vis $*^{*}\left({ }^{(h)}\right.$ jas affrication followed by anticipatory assimilation $\left[\mathrm{t}_{\mathrm{t}+\mathrm{j}}\right]>\left[\mathrm{tt}^{\mathrm{s}}\right]>[\mathrm{ss}](\sigma \sigma)$.

4
The vowels of Ancient Macedonian
4.1
$\bar{\alpha}$ corresponding to Att.-Ion. $\eta$ is occasionally documented in Macedonian inscriptions written in Attic or in the Koiné. Instances of $-\bar{\alpha}(<-\bar{\alpha} o)$ in the genitive singular of the masculines of the first declension (Ion. $-\varepsilon \omega$, Att. -ov) are
 300 BC ).

In PELLA we find the following cases of non-Attic $\bar{\alpha}$ :

- $\bar{\alpha}$ for Att.-Ion. $\eta: \Theta \varepsilon \tau i ́ \mu \bar{\alpha} \varsigma(1.2), \gamma \tilde{\alpha} \mu \alpha_{1}(1.4),{ }_{\alpha} \lambda \lambda \bar{\alpha} v$ (lines 4, 6), $\varepsilon \rho \eta ́ \mu \bar{\alpha}(1.6)$, etc.;
- genitive plural - $\tilde{\alpha} v(<-\bar{\alpha} \omega v)$ (Ion. $-\varepsilon ́ \omega v$, Att. $-\tilde{\omega} v)$ : $\tau \tilde{\alpha} v \dot{\alpha} \lambda \lambda \tilde{\alpha} v \pi \alpha \sigma \tilde{\alpha} v$ (l. 1), $\chi \rho \tilde{v} v(1.2)$.
Tzitzilis $(2008,236,240)$ cites several words from the modern dialect of Upper Pieria with retention of an ancient $\bar{\alpha}$ : $\alpha \lambda_{\text {ıкí }}$ 'age’ (< $\dot{\alpha} \lambda_{1 \kappa}$ í $\bar{\alpha}$ ) vs. standard MnGk $\eta \lambda_{\imath} \kappa i ́ \alpha$ [ili'cia] (< Att. $\left.\mathfrak{\eta} \lambda_{\imath} \kappa i ́ \alpha\right)$, хعıро $\lambda \alpha ́ \beta \alpha$ 'plough-handle’ (cf. Att.

 Hsch. $\sigma \tau \eta ́ v i o v \cdot \sigma \tau \tilde{\eta} \theta \circ \varsigma)$.


## 4.2

The spelling OY for Yoccurs sporadically in PNs and in geographic names in inscriptions written in Attic, cf. for instance the already mentioned Bou $\lambda о \mu \alpha ́ \gamma \alpha$ (= Фu入оцо́xף), Фои́бкоৎ for Фúбко̧ (IG 10.700.1, Thessaloniki, 2nd c. AD),
 also Hesychius $\dot{\alpha} \beta \rho o \tilde{v} \tau \varepsilon \varsigma$ ' ó $\rho \rho \tilde{\tilde{c}} \varsigma$. These spellings are believed to be compelling evidence that $\operatorname{PrGk} / \mathrm{u}(:) /$ retained its back articulation in Macedonian as against Att.-Ion. fronted /y(:)/ (Panayotou 1993, 11; 2007a, 438; Brixhe \& Panayotou 1994b, 213; Brixhe 1999, 47-9)

In the same vein, Tzitzilis (ibid.) cites several words in the Upper Pieria dialect with $[\mathrm{u}]$ in place of standard MnGk [i] (<AnGk v): $\alpha$ үoú $\mu v^{\prime} \alpha \sigma \tau o u$, [a'үumnastus] ‘clumsy’ (cf. standard MnGk $\alpha \gamma$ ú $\mu v \alpha \sigma \tau o \varsigma ~[a ' j i m n a s t o s] ~ ‘ u n f i t ’), ~$

30 Note also $\zeta$ for $* t s(<* d s)$ and *tw in two Achaean colonies of Magna Graecia (Méndez Dosuna 1991, 32-3): h $\bar{\varepsilon} \zeta \alpha$ to (Att. к $\alpha Ө$ ท́б $\sigma$ тo) in SEG 17.442.4 (Croton, 550-500 BC?) and $\tau \dot{\zeta} \zeta \alpha \rho \alpha$ (Att.七 ́є $\tau \alpha \rho \alpha$ ) in SEG 19.628.3 (Siris/Metapontum, 550-500 BC?).

31 Note the already mentioned hypercorrect $\beta \varepsilon \varphi \alpha i ́ \omega \varsigma$ in the same inscription (1. 6).

32 For $/ y(:) />/ u(:) /$ in ancient dialects，cf． Méndez Dosuna 1993c，117－20．

33 Voutiras（1998，8－9）interprets＜L＞as a false start for an E ，which the engraver con－ sciously left incomplete to engrave the correct spelling I．

34 Note also $\Delta$ ıvvoסoழ $\omega$ थ̃vtoc with the $Y$ engraved upon an 0 ，which is obviously the cor－ rection of a misspelling by the engraver himself （Voutiras op cit．，9）．

35 The more frequently attested exchang－ es of＜E＞and＜I＞in antevocalic position（e．g．， iop $\tau$ ń for żoptท́，Mapéaç for Mapía̧）are to be explained differently（see below）．For the neu－ tralization of／e／and／i／，Panayotou posits an abstract underspecified archiphoneme／E／．But abstract archiphonemes are a theoretical arte－ fact lacking＂psychological reality＂．In neutrali－ zation contexts，speakers identify concrete fully specified phonemes or allophones rather than abstract underspecified archiphonemes（Méndez Dosuna 1993c）．

36 As far as I know，a river name Móvクऽ $-\eta \tau \circ \varsigma$ is nowhere attested．The equivalence $\kappa v \tilde{\mu} \mu \alpha=\kappa \nu \tilde{\eta} \mu \alpha$ is also suspect．On the one hand， the word occurs in a lacuna．More importantly， $\kappa v \tilde{\eta}(\sigma) \mu \alpha$ ‘scratch＇（cf．кvaí $\omega$ ）can hardly fit into a geographical description．Semantically more suitable $\kappa \vee \eta ́ \mu \eta$ ‘shank of a mountain’，$\kappa \nu \eta \mu o ́ \varsigma$ ＇shoulder of a mountain＇cannot be the basis of an action noun $\kappa \nu \eta ̃ \mu \alpha$ ．

37 As Panayotou herself（1993，15，fn．55） makes clear，some of these misspellings could have a morphological or syntactic motivation， e．g．，the form 弓oũ $\sigma \alpha$ could well be a case of four－ part analogy：$\pi 0 \imath \tilde{\omega} v: \pi o \imath v \tilde{\sigma} \alpha=\zeta \tilde{\omega} v: \chi$ ．Panayo－ tou＇s distinction between exchanges in stressed and unstressed position seems to be irrelevant．
kouvó $\chi \tau \eta \rho^{\prime}[k u$＇naxtiri］＇wag，pest＇（cf．HellGk кuvíל $\omega$＇play the dog＇），the afore－ mentioned $\varphi \rho \circ$ и́t $\alpha$［＇fruta］（＜AnMaced．＊$\dot{\alpha} \varphi \rho \tilde{v} \varsigma-\tilde{v} \tau o \varsigma ;$ for vowel aphaeresis， cf．ỏ $\varphi \rho$ ú $\delta 10 v>\operatorname{MnGk} \varphi \rho u ́ \delta_{1}[$＇friði］］．

Retention of inherited／ $\mathrm{u}(:) /$ in Ancient Macedonian is certainly possible， but it is not as sure as scholars hold．On the one hand，in the case of［y］，back－ ing $([y]>[u])$ is a shift as natural as the delabialization $([y]>[i])$ is．On the other hand，under conditions not fully understood，several words have［u］for an an－ cient $v$ in all modern dialects（Newton 1972，19－23）：32 cf．$\mu$ оибт́́ккı［mus＇taci］ ＇mustache＇（AnGk $\mu$ ט́бта६－$\alpha к о \varsigma), ~ к о и \lambda o u ́ p ı ~[k u ' l u r i] ~ ' r i n g-s h a p e d ~ b r e a d ' ~$
 ＇bladder＇，＇bubble＇（AnGk $\varphi$ v́бкף，also $\varphi$ v́бк $)$ ）．In a few dialects this change is regular，e．g．，$ү$ uvoík $\alpha$［үy＇neka］＞modern Megarian［ju＇neka］‘woman’（stand－ ard MnGk［ji＇neka］）．Interestingly，ancient ot has undergone a similar evolu－ tion，e．g．，koi入í́［cy＇lia］＞［cu＇lia］＞［tfu＇lia］＞modern Megarian［tsu＇lia］＇belly＇ （standard MnGk［ci＇Ka］）．The palatalization of velar $/ \mathrm{k} /$ and $/ \mathrm{Y} /$ in these ex－ amples presupposes a stage［y］both for AnGk $v$ and oi．
4.3

PELLA contains four misspellings involving confusion of $I$ and $E$ and of $O$ and $Y$
 for $\pi \alpha ́ \lambda ı v,{ }^{33} \alpha \dot{\alpha} v o \rho o ́ \xi \alpha \sigma \alpha$（l．3）for $\alpha \mathfrak{\alpha} v o \rho u ́ \xi \alpha \sigma \alpha$ and $\mathfrak{h} \mu \varepsilon ́ ~(1.6)$ for $\varepsilon i \mu i ́ .{ }^{34}$ Panayotou $(1993,14)$ cites a few misspellings of $E$ for $I$ in late inscriptions written in Attic， e．g．，＇Aptع $\mu \varepsilon \sigma i ́ o u ~ f o r ~ ’ A \rho \tau \varepsilon \mu ı \sigma i ́ o v ~(185 ~ A D), ~ \chi \alpha ́ p \varepsilon v ~ f o r ~ \chi \alpha ́ \rho ı v ~(2 n d ~ c . ~ A D ?) . ~ S h e ~ i n-~$ terprets them in terms of a raising of／e／to／i／and a neutralization of／e／and ／i／in the vicinity of／r／．${ }^{35}$ Dubois $(1995,194)$ simply notes the existence of ＂［une］hésitation graphique entre $e, e i$ and $i$＂and＂une hesitation dans la gra－ phie des voyelles d＇arrière inhérente à la langue du rédacteur ou du graveur macédonien de la lamelle＂．
 not plain＇slips of the stylus＇－might attest to the merger of／e：／（＜EI＞）and／ i：／（＜I＞）．Though relatively infrequent（cf．Panayotou 1993，10），similar mis－ spellings are documented in inscriptions written in Attic and in the Koine：
 H in tòv Móvit $\alpha$ and tò $\kappa v i ̃ \mu \alpha$（supposedly for Móv $\eta \tau \alpha$ and $\kappa v \tilde{\eta} \mu \alpha$ ）in a frag－ mentary demarcation of boundaries（SEG 40．542．8 and 17，Mygdonia，359－336 BC）．${ }^{36}$ Itacistic misspellings of this type are found all over the Greek－speaking territory and，consequently，cannot count as a distinctive feature of Ancient Macedonian．

Panayotou（1993，14－17；2007a，438）also records a few exchanges of $\Omega$ and OY in late inscriptions written in Attic，which she believes to be evidence for a raising／ $\mathrm{o}: />$［ $\mathrm{o}:]$ that was boosted by a neighboring nasal：Kávouv for Káv $\omega v$（SEG 36．626．22，323－303 BC），oủvク́ for $\omega$ ©̉v́ in several deeds of sale from Olynthus and other colonies in the Chalcidice（mid－4th c．BC；Hatzopou－ los 1988），Қoṽб $\alpha$ for 弓 $\tilde{\omega} \sigma \alpha$（Vulić 1948，165，no 341，Gorna Toplica，a little after 212 AD），etc．${ }^{37}$

On the basis of the above examples and of $\beta \varepsilon \beta \alpha 10 \tau \alpha 1$＝$\beta \varepsilon \beta \alpha \iota \omega \tau \alpha{ }^{\prime}$（SEG 37.583 ，Strepsa， $400-348$ BC），Brixhe $(1999,47)$ and Hatzopoulos $(2007 a, 164)$ suppose that the distinctions of vowel quantity had been lost as early as the 4th century $B C$ ，but the epigraphic evidence is too slender to substantiate such an adventurous claim．Omicron in $\beta \varepsilon \beta \alpha \iota o \tau \alpha i ́ ~ i s ~ p r o b a b l y ~ a n ~ a r c h a i c ~ s p e l l i n g . ~$
 at face value as evidence of a more open pronunciation of short $v$ and $ı$ ．By contrast，Brixhe（1999，45－51）and Hatzopoulos（2007a，169）interpret them as hypercorrections attesting to a raising of short／e／and／o／．Allegedly，this
phenomenon was parallel to the raising of long mid-vowels and has to be considered a general feature of a wider area, which included Macedonia, Thessaly and Boeotia. According to Brixhe (op. cit., 50-1), this tendency survived into modern northern dialects, where unstressed /e o/ became regularly /i u/: $\pi \alpha \delta_{i}$ [pe'ði] > NMnGk [pi'ði], $\pi o \lambda u ́$ [po'li] > NMnGk [pu'Ki].

This hypothesis confronts several objections:
a Short and long mid-vowels rarely evolve jointly. Actually, other things being equal, short mid-vowels tend naturally to open, while long midvowels tend naturally to close.
$b$ In Thessalian, inherited long mid-vowels became /e:/ and /o:/, e.g., $\mu \varepsilon$ í $=\mu \eta$, $\chi$ ои́ $\rho \alpha=\chi \omega ́ \rho \alpha$, etc. In Boeotian primary $/ \varepsilon: /$ raised to /e:/ (e.g., $\mu \varepsilon$ í
 gathered by Brixhe (1985, 366ff., 370-1; cited by Brixhe 1999, 50) and by García Ramón (1987, 126-8; cited by Hatzopoulos 2007a, 169) for the alleged raising of short /e/ and /o/ in Boeotia and in Thessaly is insufficient and, for the most part, irrelevant.
c The misspellings io $\rho \tau \eta$ f́ for $\dot{\varepsilon} \circ \rho \tau \eta$ ń and hypercorrect M $\alpha \rho \varepsilon ́ \alpha$ for M $\alpha \rho i ́ \alpha$ (cf. $\theta$ tós for $\theta$ rós in Boeotian and in many other dialects) are no evidence of a close articulation of short/e/; they are evidence for synizesis: $\varepsilon \alpha, \varepsilon \circ>$ $\varepsilon \alpha, ~ \varepsilon \sigma>j \alpha$, jo (Méndez Dosuna 1991-2, 1993a, 1993b, 2002).
d The evidence for a Macedonian change /o:/ > /u:/ is also flimsy. Demonstrably, oủv $\eta$ is the expected outcome of *wosn $\bar{a}$ in the Euboean spoken in the Chalcidic (cf. Thess. ỏvvá). Att. $\grave{v} \eta \dot{\prime}$, Dor., Boeot. $\omega$ ט̉́ are assuredly secondary forms (Hatzopoulos 1988, 45). With the exception of Kávouv, which could be the name of a Thessalian person, the misspellings at issue occur in late inscriptions (2nd-5th c. AD).
e Pace Brixhe, there can be no relationship between the raising of long mid-vowels in Thessalian and the changes observed in modern northern dialects. First, the conditions in which the respective changes operate are quite different from one another. Second, the changes of the modern dialects are known to be relatively recent (Newton 1972, 189ff.). The loss of unstressed high vowels precedes the raising of unstressed mid-vowels in such a way that secondary /i u/ are not lost: है $\mu \varepsilon เ v \varepsilon$ ['emine] goes to ['emni], not to $\dagger$ ['emn]. ${ }^{38}$ High vowel loss is more recent than other well known phonological rules like postnasal voicing in NT clusters: thus $\dot{\alpha} \mu \alpha v ı \tau \alpha ́ \alpha ı o v>\mu \alpha v i \tau \alpha ́ \rho ı ~[m a n i ' t a r i] ~ ' m u s h-~$ room' > [man'tar] with a voiceless stop as against $\pi \alpha \dot{v} \tau \alpha$ ['panda]. Palatalization also precedes high vowel loss, i.e., it applies only to primary [ni] sequences: [mani'tari] > *[mani'tar] > [man'tar] as against है $\mu \varepsilon เ v \varepsilon$ ['emine] > ['emni], not + ['emni].
In short, I endorse Voutiras' $(1998,9,23)$ conclusion that $\delta_{1} \varepsilon \lambda \varepsilon ́ \xi \alpha \not \mu \mathrm{l}$, $\grave{\mu} \varepsilon$ and $\alpha \mathfrak{\alpha} v o \rho o ́ \xi \alpha \sigma \alpha$ in PELLA are probably plain slips of no phonetic significance. Typically curse tablets abound in mistakes and pella is no exception. As Voutiras notes, the confusion in $\delta \iota \varepsilon \lambda \varepsilon \xi \xi \propto \mu \mathrm{l}$ and $\alpha{ }^{\alpha} v o \rho o ́ \xi \alpha \sigma \alpha$ is probably due to the proximity of an E and an O in the same word. This explanation is also valid for $\Delta$ וovoбo $\varphi \tilde{\omega} v \tau 0 \varsigma$, which was corrected by the engraver himself to $\Delta$ ıovvбoৎ $\tilde{\omega} v \tau \circ$, in line 1.

## 4.4

Brixhe (2008) postulates an areal shift of unstressed /o/ (<0>) to [ə] (<E>) in word final syllables. The change is documented in Thrace, Thasos, Macedonia (only one instance: $\Pi \lambda \alpha \tau о \rho \varepsilon \varsigma ~ f o r ~ П \lambda \alpha \tau о \rho о \varsigma ~ i n ~ I G ~ 10.296, ~ T h e s s a l o n i k i, ~$ 2nd c. AD) and in Thessaly with one possible late instance in Larissa (Kóïvteऽ $\Theta \rho \alpha ́ \sigma \omega V \varepsilon \varsigma, ~ I G ~ 9.2 .791$, Roman period) and many occurrences in Hestiaeotis:

38 This fact is consistent with the geographical distribution of both changes. High Vowel Loss is much more widespread than MidVowel Raising. So-called semi-northern dialects (spoken in scattered parts of Epirus, Thrace, and Asia Minor, as well as in Lefkada, Skyros, and Mykonos) delete unstressed /i u/, but do not raise /e o/: i.e. xépı is ['çer] like in northern dialects, but $\pi \alpha_{1} \delta \delta^{\prime}$ is $\left[\mathrm{pe}^{\prime} \delta_{i}\right]$ like in southern dialects. This geographical configuration strongly suggests that High Vowel Loss predates Mid-Vowel Raising.

39 Brixhe＇s description is inaccurate．Ad－ mittedly，assimilation in CC clusters typically af－ fects syllable codas（i．e．，＂consonnes appuyées＂）． But，in Greek word－initial complex onsets were resyllabified in sandhi after a vowel．Actually， Brixhe＇s example ó ह̉лì Ttu入íyðळৎ（SEG 36．548．21） is a case in point with $\varepsilon \pi \pi \grave{\iota} \Pi \tau^{\circ}\left(\left[\right.\right.$ epip． $\left.\left.\mathrm{t}^{\circ}\right]\right)$ be－ ing assimilated to $\varepsilon$ ह̇亢̀ $T \tau^{\circ}$（［epit． $\left.\mathrm{t}^{\circ}\right]$ ）；cf．also oi
 2，Phalanna，3rd c．BC）．

40 Brixhe fails to mention this paper even though he attended its oral presentation in Ber－ lin（20th September 2001）．
 BC），тútعiৎ（Att．тoṽтorৎ，ibid．1．4），K $\lambda$ í $\alpha v \delta \rho \varepsilon \varsigma ~(A t t . ~ K \lambda \varepsilon ́ \alpha ~ \alpha v \delta \rho o \varsigma, ~ i b i d . ~ l . ~ 11), ~ \pi \alpha \rho ~$



Like most scholars who have previously dealt with the problem，Brixhe in－ terprets these data in terms of a vowel weakening triggered by a＇non－final＇ strong stress accent（＂l＇émergence précoce d＇un accent à dominante inten－ sive＂）．Allegedly，Mid－Vowel Raising in modern northern Greek dialects is an－ other manifestation of vowel weakening．Brixhe cites several sound changes as evidence for a strong stress accent in the area：
a apocope of the thematic genitive singular in Pelasgiotis－olo＞－ol；
b syncope in，e．g．，Thess．そॄvסókol；
c assimilation of syllable－initial consonants（＂toute consonne appuyan－

$d$ palatalization of consonants before $/ \mathrm{j} /$ ．
None of Brixhe＇s arguments is compelling：
a The epigraphical evidence for the change in Macedonia is slender（one example in an Illyrian PN！）and late．
$b$ There can be no continuity between the alleged weakening of word－fi－ nal／ $\mathrm{o} /$ to［ $\partial]$ and the modern shift of unstressed $/ \mathrm{o} / \mathrm{/} / \mathrm{u}$／in northern dialects（and what about／e／＞／i／？）．On the one hand，the conditions of the changes at issue are dissimilar．On the other hand，the changes［o］＞ ［ə］（centralization）and $[\mathrm{o}]>[\mathrm{u}]$（raising）are utterly different．A se－ quence of changes $[\mathrm{o}]>[\partial]>[\mathrm{u}]$（or，for that matter，$[\mathrm{e}]>[2]>[\mathrm{i}]$ ）is un－ natural．
c Not all of the phonetic processes adduced by Brixhe attest to the devel－ opment of a strong＂non－final＂stress．Stress－languages are not more prone to consonant palatalization induced by yod or to assimilation of syllable－final consonants than pitch－or tone－languages are．
d As I have shown in a previous article（Méndez Dosuna 2007a，367－77），${ }^{40}$ Modern Tsakonian attest to a change which is strongly reminiscent of the change in Hestiaeotis：AnGk óp $\tau$ тo＞Tsak．［＇ande］＇bread＇，íđtós＞
 ＇cheese＇．The Tsakonian data clearly demonstrate that accent is irrele－ vant to the issue，since the shift affects indifferently stressed and un－ stressed／o／．As in Hestiaeotis，／o／in the last syllable became／e／in contact with dentals and palatals，but remained unchanged after labi－ als and velars：cf．Hist．Thess．そॄvסókoı（SEG 36．548．19）；＇Ađтó $\lambda \alpha 0 \varsigma$（ibid．
 ह́pı甲оऽ＞［＇erifo］＇kid，young goat＇，$\lambda$ и́ко $>$＞［＇Kuko］＇wolf＇．Arguably，／o／－ fronting was triggered by assimilation to the neighboring consonants．

5
The dialectal features of Ancient Macedonian
5.1

Due to the scarcity of epigraphic material written in what we identify as the local vernacular，our knowledge of Ancient Macedonian is still very limited． We have already noted that non－Attic－Ionic long $\bar{\alpha}$ is abundantly documented in PNs both in the few dialectal texts available and in the more numerous in－ scriptions written in Attic and in the Koine．

The features of peLLA（see Appendix，p．287）have been thoroughly scruti－ nized by scholars（Voutiras 1998，20－34；Dubois 1995；Brixhe 1999；Hatzopoulos 2007a；Panayotou 2007a；O＇Neil 2006；Tzitzilis 2008）．A number of dialectal fea－ tures seem to point to Doric and more specifically to North－Western Doric：
$1 \bar{\alpha}$ for Att．－Ion．$\eta: \Theta \varepsilon \tau i ́ \mu \bar{\alpha} \varsigma$（l．2），$\gamma \tilde{\alpha} \mu \alpha \_$（l．4），$\alpha \ddot{\alpha} \lambda \lambda \bar{\alpha} v$（lines 4，6），etc．；
$2-\tilde{\alpha} v$ in the genitive plural of the first declension：$\tau \tilde{\alpha} v \dot{\alpha} \lambda \lambda \tilde{\alpha} v \pi \alpha \sigma \tilde{\alpha} v(1.1)$ ， $\chi \rho \tilde{\alpha} v(1.2)$ ；
3 apocope of $\pi \alpha \rho \alpha ́$（before any consonant）and of $\kappa \alpha \tau \alpha \dot{\alpha}$（only before den－ tal stops）：$\pi \alpha \rho \kappa \alpha \tau \tau i ́ \theta \varepsilon \mu \alpha \mathrm{l}$（l．2）；

adverbs in－к $\alpha$ ：о́ $\boldsymbol{\pi}$ кк（1．3）；41
hyphaeresis $\Theta \varepsilon o->\Theta \varepsilon$－in $\Theta \varepsilon \tau i ́ \mu \bar{\alpha} \varsigma ~(l . ~ 2), ~ \Theta \varepsilon \tau i ́ \mu \bar{\alpha}$（l．7）；
optative in a temporal clause referring to the future：óтóка．．． $\delta_{1 \varepsilon \lambda<i ́>\xi \alpha \not \mu ı} \kappa \alpha i ̉ \alpha ̉ v \alpha \gamma v o i ́ \eta v(1.3) ;$
8 o兀 for $\sigma \theta$ ：$\gamma \varepsilon v \varepsilon ́ \sigma \tau \alpha l$（l．8）．
Features 1－5 are shared by all Doric dialects．${ }^{42}$ Neither the retention of $\bar{\alpha}$ nor the hypothetical retention of the pronunciation $[u(:)]$（see 4．2）are diag－ nostic for purposes of genetic classification，since they are mere archaisms in－ herited from Proto－Greek．Features 2－3 are innovations，but not exclusive to Doric．The endings of the gen．sg．masc．$-\bar{\alpha}$ and the gen．pl．$-\tilde{\alpha} v$ are also found in
apocope of $\kappa \alpha \tau \alpha ́$ before dental stops is a pan－Doric feature，but it is also found in Arcadian，in Boeotian，and in Thessalian．

More significant are features $4-5$ ，which are exclusive to Doric and to Boeotian．${ }^{43}$ Hyphaeresis occurs occasionally in Boeotian and in several Doric dialects（Delphian，Coan，and especially Megarian）．Features $7-8$ point direct－ ly to NW Doric．

Concerning the dialect classification of Ancient Macedonian，Brixhe（1999， 45）stresses two important facts in PELLA：

1 Unlike Thessalian，which has geminate $-\mu \mu$－for ${ }^{*}-m s$－and＊－sm－clus－ ters（ ${ }^{\gamma} \gamma \alpha ́ \mu \mu \alpha 1, \dot{v} \mu \mu \dot{\varepsilon} \omega v=$ Att．$\left.\gamma \tilde{\eta} \mu \alpha 1, \dot{v} \mu \tilde{\omega} v\right)$ ），in PELLA the outcomes of these clusters have single $-\mu$－with compensatory lengthening of the preceding vowel：cf．$\gamma \tilde{\alpha} \mu \alpha 1$（l．4），$\dot{v} \mu \tilde{\omega}<v>($ tab．$\dot{v} \mu \tilde{\omega} \mu, l .5) .{ }^{44}$ Curiously， $\dot{v} \mu \tilde{\omega} v$ is at odds with the evidence of a fragment quoted by Athenae－ us 7．323b（Strattis fr． 29 Orth＝PCG 29）from The Macedonians，a com－ edy composed by Strattis（5th c．BC），in which a character，possibly a Macedonian，utters the words ư $\mu \mu \varepsilon \varsigma$＇$\Omega \tau \tau \ldots \kappa$ í＇you，Attic folk＇．Colvin $(1999,279)$ remains undecided as to the reliability of this piece of infor－ mation，but Hatzopoulos（2007b，234）notes the ethnic Kpavvéб讪 in IG 10．2．2．36．2（Heraclea Lyncestis，2nd－3rd c．AD），which could corre－ spond to a place name＊K $\rho \alpha ́ v v \alpha$ reminiscent of $K \rho \alpha \nu v \omega ́ v$ ，a city in Thes－ salian Pelasgiotis（cf．Lesb．k $\alpha \alpha ́ v v \alpha$ ，Dor．Arc．$\kappa \rho \frac{\bar{\alpha} v \alpha, ~ A t t .-I o n . ~ к \rho \eta ́ v \eta ~<~}{\text {＜}}$ ＊krasnā ‘fountain’）．${ }^{45}$
2 Brixhe also notes that the athematic dative plural $\delta \alpha^{\prime} \mu \circ \sigma \mathrm{l}$（1．3）is not compatible with Thessalian（the expected form would be $\delta \alpha \_$цóveббı）．${ }^{46}$ O＇Neil $(2006,197)$ ，believes that it cannot be NW Doric either，for which one should expect thematized $\delta \alpha ı \mu o ́ v o r \varsigma$, but this claim is unwarranted since，as Brixhe had already noted，the thematic ending－ors is not gen－ eral in NW Doric（Méndez Dosuna 1985，473ff．）．
We have already referred to some features of Ancient Macedonian that may have survived in modern vernaculars．In addition to（1）the preservation of ancient $\bar{\alpha}$（Att．－Ion．$\eta>\operatorname{MnGk} / \mathrm{i} /$ ）and（2）the pronunciation of ancient $v$ as ［u］，which have been already discussed，Tzitzilis（2008，231－5）notes the exist－ ence of traces of two further Macedonian－Doric isoglosses：

3 Preservation of ancient $/ \mathrm{w} /(\mathrm{f})$ as［v］，which could also be a feature shared with Thessalian：$\beta$ pó弓ous ‘knob’（standard MnGk pó弓os ‘callus’）



41 Brixhe，Panayotou and O＇Neil assume that ó $\pi$ ók $\alpha$ is equivalent to Att．－Ion．ó $\pi$ ó $\tau \alpha v$ ．Ac－ cordingly，in their view，PELLA attests to the use of $k \alpha$ in Ancient Macedonian．Both claims are in－ correct．Dor．ö $\alpha$ ，ó о́кк $\alpha$ correspond to Att．－Ion． ötع，о́тótع（＜n．sg．＊h ${ }_{1}$ jod $+-k a$ and－te）．The Doric equivalents of Att．－Ion．ö $\tau \alpha v$ ，о́то́т $\alpha v$ are őк $\alpha \kappa \alpha$ ， óло́к $\alpha$ к $\alpha$ or their apocopated versions öкк $\alpha$ ， о́то́ккх（Lac．，Megar．，Rhod．，etc．；for the apocope see Ruijgh 1996，402，424，490）．On the other hand，even though the use of $k \alpha$ with the opta－ tive in temporal and conditional clauses is well documented in NW Doric（cf．ह̇лદí Ká $\tau \imath \pi \alpha ́ \theta$ oı K $\lambda$ عот $\quad$ т́ $\rho \alpha$, SGDI 2171．11－12，Delphi，100－50 $B C$ ），the modal particle is not obligatory（Crespo 1993）．Some subscribe to Wackernagel＇s hypoth－ esis that őк $\alpha$ goes back to morphologically trans－ parent ${ }^{*} \circ \delta \kappa \alpha$ with regular loss of a word－final stop，while őккх resulted from the assimilation of morphologically opaque＊ő $\delta \kappa \alpha$（cf．Molinos Tejada 1992，337－8，fn．28）．But this explana－ tion is ruled out by the fact that，unlike őко and ото́к $\alpha$ ，ӧкк $\alpha$ and о́то́кк $\alpha$ are almost invariably constructed with the subjunctive（like Att．－Ion． ö $\tau \alpha v$ ，ó о́ $\tau \alpha v$ ）or with the optative．

42 Dubois $(1995,192)$ notes two further lexi－ cal Doricisms：té ${ }^{\prime} \circ \varsigma$ for $\gamma \alpha ́ \mu \circ \varsigma$ and кат $\alpha ү \rho \alpha ́ \varphi \omega$ ＇to register（in a curse）＇for $\kappa \alpha \tau \alpha \delta \varepsilon ́ \omega$＇to bind fast （with a spell）＇．

43 The dative singular of the first person pronoun is not attested either in Boeotian or in Corynna＇s fragments，but Apollonius Dyscolus （De pronominibus 104bc）reports the form $\varepsilon$ ह̇ú（＝ $\left.\dot{\varepsilon} \mu o i^{\prime}\right)$ as Boeotian．This is also the form used by the Theban merchant in Aristophanes＇Achar－ nians（1．895）．

44 Note that，like in many Dorian dialects， the genitive plural $\dot{\cup} \mu \tilde{\omega}<v>$ must be an allegro form．The contraction $\varepsilon \omega>\omega$ ，unexpected out－ side Attic，is to be attributed to the grammatical status of pronouns．

45 Alcorac Alonso Déniz reminds me that Arcadian is not geographically homogene－ ous in this respect，while the first compensa－ tory lengthening is general in other towns，Or－
 （IPArk 15A． 33 and 49，ca．360－350）．I fully disagree with Hatzopoulos＇idea，borrowed from Brixhe， that the geminates of Thessalian，Lesbian，Arca－ dian，and－maybe－Macedonian are an archaizing feature，i．e．，a stage previous to compensatory lengthening，for degemination cum compensa－ tory lengthening（－VC：－＞－V：C－）seems to be un－ heard－of in present－day languages．

46 As is known，the ending－$\sigma$ occurs in an inscription from Thessaliotis：X $\rho \bar{\varepsilon} \mu \alpha \sigma$（IG 9．2．257．4，Thetonium，5th c．）．

47 Both etymologies are quite speculative.
48 The second member could be connected to standard MnGk koutó 'stupid', which is usually traced back to kottó 'rooster'.

49 Hsch. $\delta \alpha ́ \rho[\varepsilon] \uparrow \rho \cdot$ tò $\alpha \pi$ д̀ тoũ $\mu \varepsilon \gamma \alpha ́ \lambda o v ~ \delta \alpha-$



50 Imaginably, $\mu$ oú $\rho o$ could be a back-formation from compounds of the $\beta \alpha \tau$ ó $\mu$ oupo type.

51 Cf. Joseph 1997, who records fifty-six variants of $\mu \omega \rho \varepsilon$ in the modern dialects.

52 One could think of a playful derivate of ко $\lambda_{0} \beta$ ós 'tailless, short-tailed'.

53 Distant assimilation $e \_a>a \_a$ must have also played a role. Interestingly, /e/ is unstressed in $\pi \lambda \alpha \kappa \varepsilon \rho o ́ \varsigma, ~ \pi \varepsilon \rho ı \pi o ́ \delta ı o v, ~ a n d ~$ ко $\lambda о ́ \beta \varepsilon \rho \delta о \varsigma$.
 For the preservation of $f$ in Ancient Macedonian, cf. also O $\alpha$ סíorn (= Fāסíotๆ, Att. 'Hסíotๆ; SEG 41.575, Pella, ca. 350-250 BC), Ov $\alpha \delta \tilde{\eta} \alpha$ (= F $\bar{\alpha} \delta \varepsilon \tilde{i} \alpha$, Att. 'Hס ${ }^{\prime}$ ĩ $;$ EAM 1.94a.2, Eordaea, 2nd-1st c. BC).
4 Variation between / $\mathrm{a} /(<$ ancient /a:/) and / $\mathrm{u} /$ (< ancient $\omega / \mathrm{o}: /$ ) in two words: $\beta \alpha \tau$ б̌vó $\mu \alpha \rho o u$ [vat)'nomaru] 'raspberry' documented at Elaphos, which Tzitzilis etymologizes as a compound of $\beta \alpha \tau \sigma l v$ lá 'bramble' + $\mu$ 人́ $\rho$ o 'berry' ( < * $\mu \tilde{\alpha} \rho o v$ reconstructed on the basis of Alb. mare 'bearberry', as against more widespread $\beta \alpha \tau$ б̌vó $\mu$ ov oov [vatf'nomuru] whith a second member $\mu$ oú $\rho o$ (allegedly from $\mu \tilde{\omega} \rho o v$ ) (cf. Standard MnGk $\beta \alpha$ tó $\mu$ ои $\rho o$ 'raspberry', 'blackberry', $\mu$ ои́ $\rho$ ' 'mulberry'); a variant $\mu \alpha \rho^{\prime} \kappa o u ́ \hat{\tau}\left[\mathrm{mar}^{\mathrm{j}}{ }^{\prime} k u t^{\mathrm{j}}\right.$ ] ‘dull', 'idiot' at Elaphos, which is etymologized as a
 in contrast to more widespread $\mu$ ou $\rho^{\prime}$ кoú $\hat{\tau}$ [muri ${ }^{\left.\text {j } k u t t^{j}\right] ~ f r o m ~ A n G k ~}$ $\mu \omega \rho$ ó $\varsigma$ stupid'. The vocative $\mu \alpha \rho \varepsilon ́(=\mu \omega \rho \varepsilon$ ) is also documented. Tzitzilis compares this contrast to Dor., Boeot. $\pi \rho \tilde{\alpha} \tau 0 \varsigma v s . \pi \rho \tilde{\omega} \tau 0 \varsigma$ in the other
 the hand'.
The first three features are not very useful for purposes of dialect classification since, as indicated above, they are archaisms that cannot prove a close genetic relationship. As for the variation $[\mathrm{a}] \sim[\mathrm{u}]$ interpreted as a remnant of an ancient dialectal contrast between Doric $\bar{\alpha}$ and non-Doric $\omega$, Tzitzilis' interpretation is hazardous. To begin with, the evidence for ancient * $\mu \tilde{\alpha} \rho o v$ and * $\mu \bar{\alpha} \rho o ́ \varsigma$ is weak. Moreover, the long $\omega$ of $\mu \tilde{\omega} \rho o v$ is doubtful: omega in Hesychius' gloss $\mu \tilde{\omega} \rho \alpha \cdot \sigma 0 \kappa \alpha ́ \mu ı v \alpha$ is likely to be a misspelling, since otherwise $\mu o ́ \rho o v ~ a l w a y s ~ h a s ~ a n ~ o m i c r o n . ~ L i k e w i s e, ~ a ~ f o r m ~ * ~ \mu ~ \overline{\alpha ~} \rho o ́ \zeta ~ i s ~ u n a t t e s t e d . ~ A l l ~ a n-~$ cient sources, including Sophron ( $\mu \omega \rho$ ót $\varepsilon \rho \circ \varsigma$ fr. 74) who wrote in Doric, invariably have $\mu \omega$ pós with $\omega$. The [a] in MnMaced. $\beta \alpha \tau \sigma \check{v}$ ó $\mu \alpha \rho o u$ can be an irregular outcome in unstressed position. Note that the $[\mathrm{u}]$ of standard MnGk $\mu \circ$ ópo is no less irregular. ${ }^{50}$ As for [a] in $\mu \alpha \rho^{\prime} \kappa o u ́ \hat{\tau}, \mu \alpha \rho \varepsilon ́$, it is to be included in the list of the irregular outcomes starting as allegro variants of $\mu \omega \rho \varepsilon$ : cf. $\mu \omega \rho \varepsilon$, $\mu \pi \rho \varepsilon ́, \beta \rho \varepsilon ́, \rho \varepsilon$ as the most widespread. ${ }^{51}$ Finally, the etymology of $\delta \dot{\alpha} \rho ı \varsigma, \delta \dot{\alpha} \rho \varepsilon ı \rho$ forms and their relationship with $\delta \tilde{\omega} \rho o v$ are uncertain.

Tzitzilis (op. cit., 235-6) identifies two isoglosses specific to Macedonian and ancient NW Doric:

1 /er/ > /ar/: $\pi \lambda \alpha \kappa \alpha \rho o ́ \varsigma ~ ' b r o a d, ~ f l a t t e n e d ’ ~(s t a n d a r d ~ M n G k ~ \pi \lambda \alpha к \varepsilon \rho o ́ \varsigma) ; ~$ $\pi \rho \alpha \pi o ́ \delta '\left[p r a ' p o \chi_{j}\right]$ 'a type of gaiter'<* $\pi \alpha \rho \pi o ́ \delta i o v<A n G k \pi \varepsilon \rho ı \pi o ́ \delta i o v ; ~ k o u-~$ $\lambda о \beta \alpha ́ \rho \delta \alpha к о и \varsigma ~ ‘ s h o r t ’ ~(T s a k . ~ к о \lambda о \beta \varepsilon ́ \rho \delta ı к о ~ ‘ v e r y ~ s h o r t ’, ~ M a n i ~ к о \lambda o ́ ~ \beta \varepsilon \rho \delta о \varsigma ~$ 'hobbler'), purportedly from *ко入ófeр $\delta$ ос a compound of кó ${ }^{\text {о }}$ с 'polled' and * ${ }^{\prime} \varepsilon ́ \rho \delta \alpha$ 'tail' (cf. кódoupos 'with short tail'). ${ }^{52}$
 $\delta \alpha \kappa \tilde{\omega}<\sigma \eta \delta \rho \alpha \kappa \tilde{\omega}$ (cf. Hsch. $\rceil \emptyset \rho \alpha \kappa \varepsilon \tilde{\imath} \cdot k \tau \cup \pi \varepsilon \tilde{\imath})$.
In addition to the fact that the etymology of some of the words at issue is far from certain, neither of the two features is clear evidence of any close affinity between ancient NW Doric and the modern vernacular of Upper Pieria as a descendant of Ancient Macedonian. Undeniably, the change /er/ >/ar/ is characteristic of NW Doric and Elean (Buck 1955, 23-4, Méndez Dosuna 1985,
 $\varphi \alpha ́ \rho \bar{\varepsilon} v$, fó $\rho \gamma o v$ (Att. है́pyov). But /er/ >/ar/ is a natural change documented in many languages of the world, including Modern Greek: AnGk $\varepsilon$ ह́p $\alpha \lambda \varepsilon \tilde{\imath} o v, ~ \varepsilon ่ \rho \gamma \alpha ́-~$ $\tau \eta \varsigma>M n G k \alpha \rho \gamma \alpha \lambda ı$ ó [arүa'Ko] 'loom’, $\alpha \rho \gamma \alpha ́ \tau \eta \varsigma^{\prime}$ worker'. ${ }^{53}$ So, the coincidence between Ancient NW Doric and the modern vernacular of Upper Pieria might be accidental. The hypothetical change / $: r$ / > /a:r/ (no instances of /re:/ > / ra:/ seem to be attested) has no equivalent in ancient NW Doric dialects.

Finally, Tzitzilis also notes two interesting coincidences between Ancient Thessalian and the Upper Pieria dialect:

1 The afore-mentioned ${ }^{*} k^{w} e>\pi \varepsilon$ : cf. Thess. $\pi \varepsilon \tau \rho o-$ (Att. $\tau \varepsilon \tau \rho \alpha-$ ), MnMaced. $\pi \alpha \tau \rho \alpha ́ \gamma \gamma о \cup \lambda о \varsigma, \pi \alpha \tau \rho \alpha \chi \varepsilon$ 亿́ $\lambda \alpha \varsigma$.
$2 \zeta \alpha$ - for $\delta 1 \alpha-:$ cf. Hom. $\zeta \alpha \dot{\alpha} \theta \varepsilon o \varsigma$ ‘very divine’ with a strengthening meaning, MnMaced. $\zeta \alpha \gamma \rho \stackrel{\alpha}{\prime} \zeta \varepsilon 1$ 'it gets tangled and frays (said of a yarn)' < * $\delta 1 \alpha-\gamma \rho \alpha \iota \alpha ́ \zeta \omega{ }^{54}$

## 5.2.

Further evidence that might be relevant for the classification of Ancient Macedonian could be provided by an unpublished oracular tablet found at Dodona in 1930 and provisionally dated by its editors in the early 4th century BC (Dakaris, Vokotopoulou \& Christidis, forthcoming, no 2493A, Dodona Museum, 871). ${ }^{55}$ Its dialectal features suggest that this consultation might be written in Macedonian (Méndez Dosuna 2007b, 283-4).

The text transcribed by the editors reads as follows:



"Zeus and Diona, shall Kebalios have children from the wife he has now, and shall they survive?"

The text cannot be Attic-Ionic on account of the following features:

- $\bar{\alpha}$ in $\Delta t \omega ́ v \bar{\alpha}(l .1), \tau \tilde{\alpha} \varsigma$ (lines 2,3) vs. Att.-Ion. $\Delta t \omega ́ v \eta, \tau \tilde{\eta}$;
- double- $\sigma \sigma-$ in $\begin{gathered} \\ \sigma \\ \sigma o v \tau \alpha l \\ \text { (l.1) vs. Att.-Ion. } \\ \text { है } \sigma o v \tau \alpha l ; ~\end{gathered}$
- the use of the "article" as a relative: $\tau \tilde{\alpha} \varsigma ~ v \tilde{v} v ~ ह ै \chi モ \varepsilon ~(1.3) .56 ~$

A Boeotian origin is also out of the question:
 3); 4th-century Boeotian has $\mathrm{H}(/ \varepsilon: /)$ and I (/i:/): हैббovӨ हैXī1; ${ }^{57}$

- *dj, * $g^{w j}>\zeta$ in Zعṽ (l. 1), $\zeta \dot{\omega} \sigma o v \tau \iota ~(1 . ~ 3) ~ a s ~ a g a i n s t ~ \delta ~ i n ~ B o e o t . ~ \Delta \varepsilon \tilde{v}$, $\delta \omega ́ \sigma o v \theta$;
- $\dot{\varepsilon} \xi>\varepsilon \dot{\varepsilon} \kappa$ before a consonant in $\varepsilon \in \kappa \tau \tilde{\alpha} \zeta$ (1.3) vs. Boeot. $\dot{\varepsilon} \varsigma \tau \tilde{\alpha} \zeta$;
 as against Boeot. $-v \theta \eta,-v \theta \mathrm{l}$;
- thematic dative singular - $\omega 1$ (K $\kappa \alpha \lambda \lambda i ́ \omega ı, 1.2)$ vs. Boeot. -oı. ${ }^{58}$

Some features are hardly compatible with Thessalian:
 Thessalian should normally have EI (/e:/) and OY (/o:/);


- thematic dative singular. $-\omega \mathrm{l}(\mathrm{K} \beta \beta \alpha \lambda i ́ \omega t, 1.2)$ vs. Thess. -ov (or -ol);59
- non-aspirated stops in third plural endings है $\sigma \sigma 0 v \tau \alpha \downarrow(1.1), \zeta \omega ́ \sigma o v \tau l(1.3)$ vs. Thess. $-v \theta \alpha \mathrm{l}(-v \theta \varepsilon ı v$ in Larissa), $-v \theta \mathrm{l}$.
Most of the dialectal features of the text could be NW Doric, ${ }^{60}$ but such an origin is incompatible with the futures $\left.\begin{array}{c} \\ \sigma \\ \sigma\end{array}\right)$ ic text we should expect the "Doric" futures $\dot{\varepsilon} \sigma \sigma \varepsilon ́ \sigma v \tau \alpha ı, \zeta \omega \sigma \varepsilon ́ o v \tau ı$. Though not completely impossible, a future of the Heraclean type with synizesis and yod


Admittedly, some of the Dodona oracular texts exhibit a dialectal mixture. But in most cases it is evident that Doric features have intruded into a non Doric text. The members of the local staff of the sanctuary, to whom the consultations were dictated by illiterate consultants, are probably responsible for these mistakes. Inadvertedly, they substituted forms of their own dialect for

54 The prefix $\zeta \alpha$ - used to be considered to be an Aeolic feature in Homer, but Lesbian $\zeta \alpha ́$ as a preposition and $\zeta \alpha$ - as a preverb occur only in late inscriptions and in glosses. Thessalian has $\delta_{1}$. Sowa (2009) plausibly argues that $\zeta \alpha \dot{\alpha}$ must be a Homericism that made its way into the Lesbian poetic tradition.

55 Some eighteen months before his premature death, Tasos Christidis sent me a copy of a preliminary version (May 2003) of the Dodona volume. The copy did not include either photographs or facsimiles of the tablets. For further details, see Méndez Dosuna 2007b; 2008, 53.

56 This use is frequent in Homer and Herodotus, but is not attested in Ionic inscriptions.

57 This argument is not decisive since these spellings are occasionally documented in early 4th-century Boeotian inscriptions. Note that
 did not contract to * $\pi \tilde{\eta} \varsigma$ in Boeotian.

58 A few instances of - $\omega \mathrm{t}$ in 4th-century inscriptions could be genuine. Vottero (1995) explains them away as borrowings, but, to my mind, this hypothesis is unwarranted. The later outcomes $-v[-\varnothing:]$ (3rd c. BC) and $-\varepsilon \varepsilon[-\varepsilon$ : (2nd c. $B C$ ) are irrelevant to the present issue.
$59-\mathrm{ov}$ (Pelasgiotis, Thessaliotis) is the regular phonetic outcome of $-\omega \mathrm{l}$ : [o:i $]>[\mathrm{o}:]$. Datives of the NW Doric type in -ol are attested in Western Thessaly: -ol ( [oii] > [oil]) occurs in Cierium (Thessaliotis) and $-\varepsilon l([0 i]>[e i j)$ in Matropolis (Hestiaeotis). For Thess. -ol, see Lejeune 1941; for - $\varepsilon$ l, see Méndez Dosuna 2007a, 367-77.

60 The thematic dative singular $K \varepsilon \beta \alpha \lambda i ́ \omega t$ is no exception since -ol, characteristic of NW Doric, shows up only in the late 3rd century BC (see Méndez Dosuna 1985, 413ff.).

61 For synizesis and yod absorption in the futures of Heraclean, cf. Méndez Dosuna 1993b. Some alleged examples of "Heraclean" futures in the Dodonean lamellae are extremely uncertain (Méndez Dosuna 2008, 76-7).
the corresponding forms of the vernacular of the consultant (Méndez Dosuna 2008, 68-9). For instance, Lhôte (2006, no 91, late 4th c. BC) combines long $\bar{\alpha}$




The name of the consultant could give us a hint about his provenance. $K \varepsilon \beta \alpha \lambda_{10 \varsigma}$ is the equivalent of unattested ${ }^{*} К \varepsilon \varphi \alpha \lambda_{1}$ ıৎ, with the voicing characteristic of Macedonian; cf. Att. К $\varepsilon \varphi \alpha \lambda$ оऽ, $К \varepsilon \varphi \alpha \lambda$ ĩvos as against Maced. $K \varepsilon \beta \alpha \lambda$ ĩvo $\varsigma$, which enjoyed a certain popularity during the Hellenistic period all over Greece. One must recognize that PNs are a poor index for classificatory purposes since they are easily borrowed from one language or one dialect into another. This notwithstanding, if the date suggested by the editors is correct, a borrowing is unlikely since at that time Macedonian PNs lacked prestige. Macedonian PNs became fashionable only after Alexander's conquests more than fifty years later.

## 6

By way of conclusion, the glosses recorded by Hesychius and the few documents possibly written in the local idiom indicate that Macedonian was a Greek dialect. It must have been a close sibling to NW Doric Greek except for two crucial features: the voicing of plosive /ptk/to $[\mathrm{bdg}]$ and of fricative $/ \mathrm{f} \theta$ $s \mathrm{x} /$ to $[\mathrm{v} \partial \mathrm{z} \gamma]$, and possibly the future of the ordinary sigmatic type.

